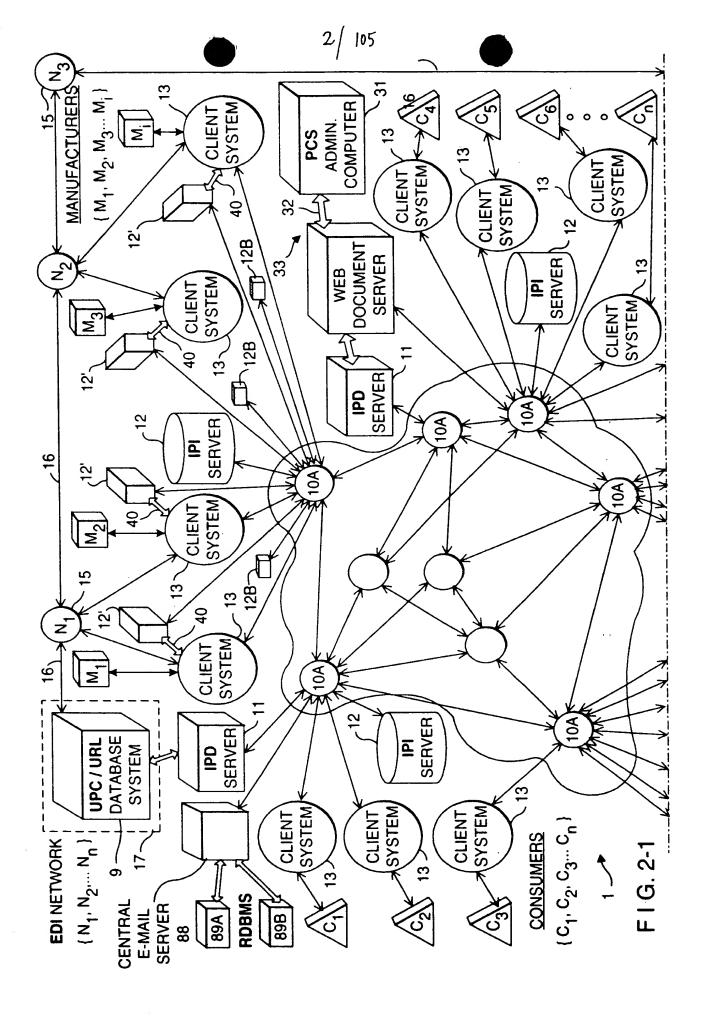
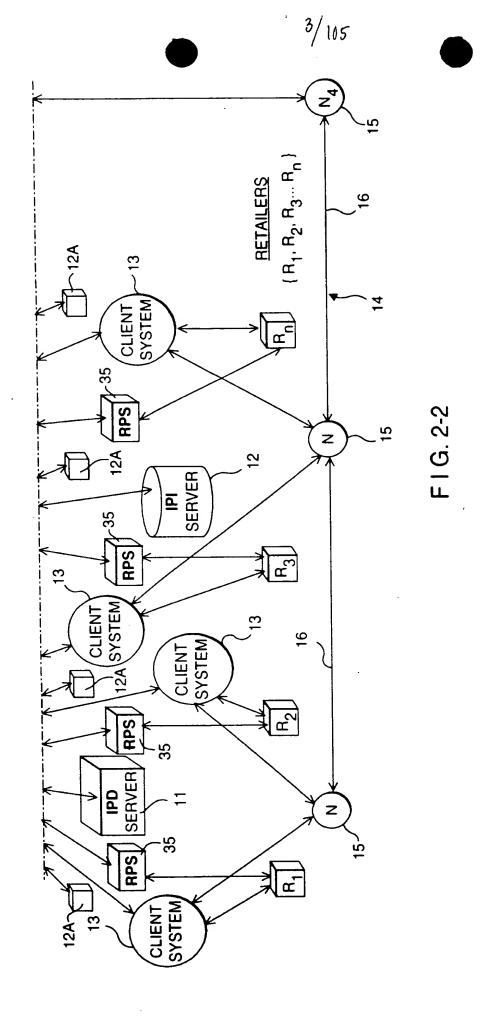
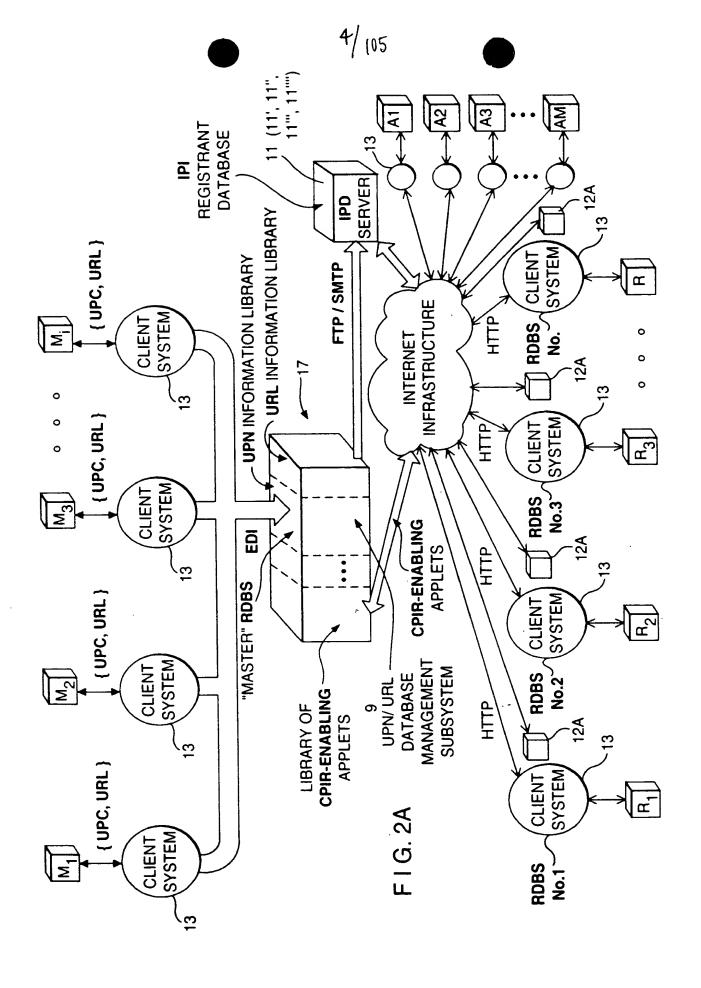
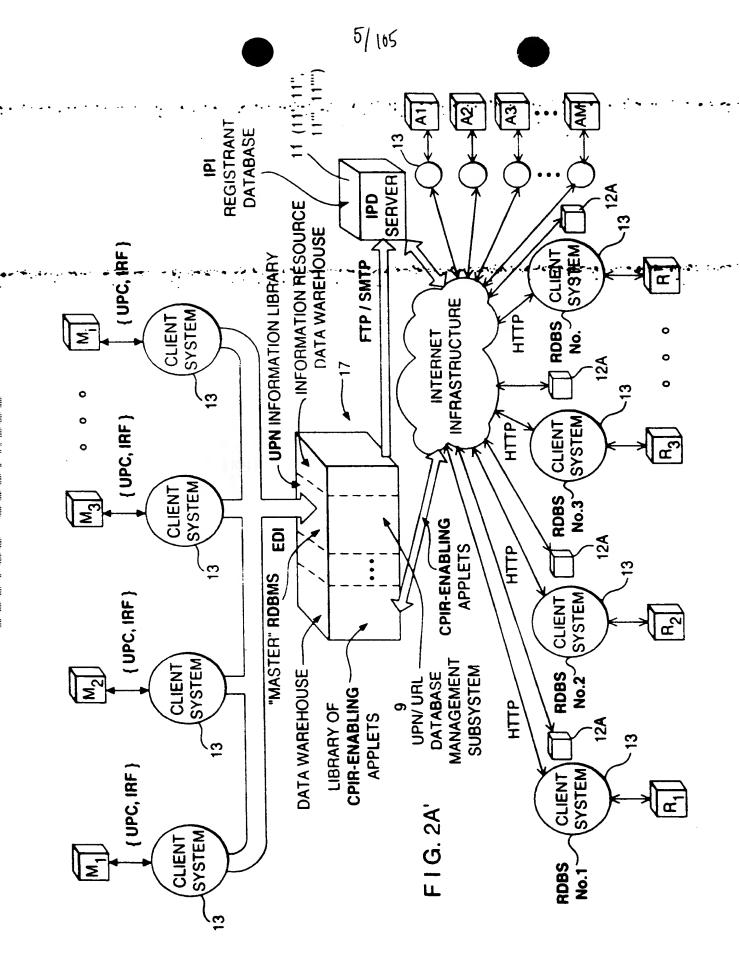


<u>Е</u>

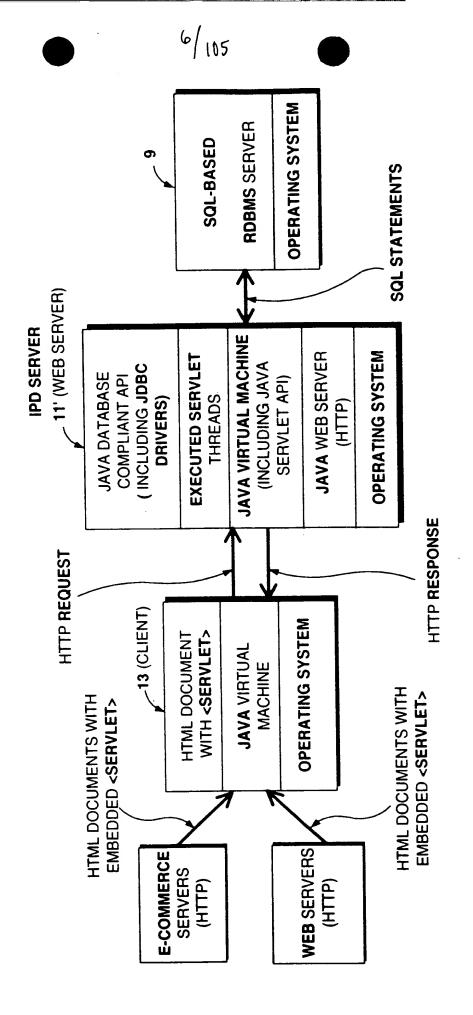








MECHANISM FOR ACCESSING CONSUMER PRODUCT INFORMATION FROM RDBMS SERVER USING SERVER-SIDE APPLETS EMBEDDED IN HTML DOCUMENTS



F1G. 2B1

SERVER USING CLIENT-SIDE APPLETS EMBEDDED IN HTML DOCUMENTS AND CGIS MECHANISM FOR ACCESSING CONSUMER PRODUCT INFORMATION FROM RDBMS

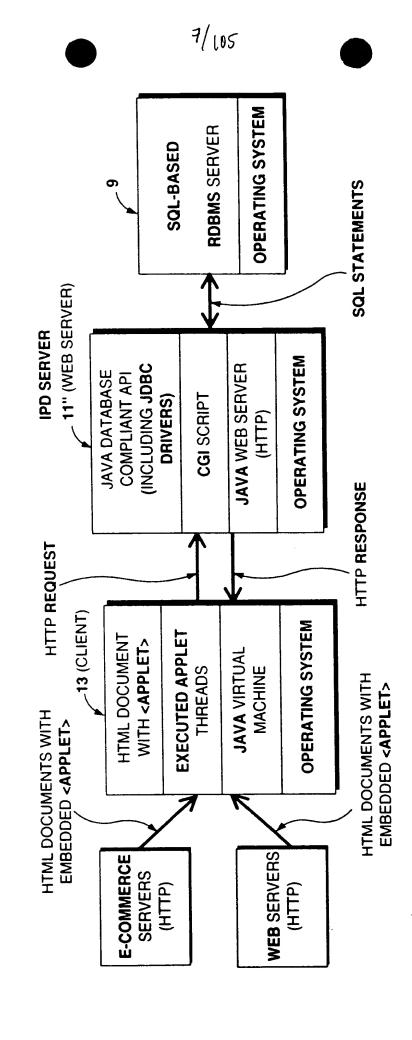


FIG. 2B2

MECHANISM FOR ACCESSING CONSUMER PRODUCT INFORMATION FROM RDBMS SERVER USING CLIENT-SIDE APPLETS EMBEDDED IN HTML DOCUMENTS AND SOCKET CONNECTIONS

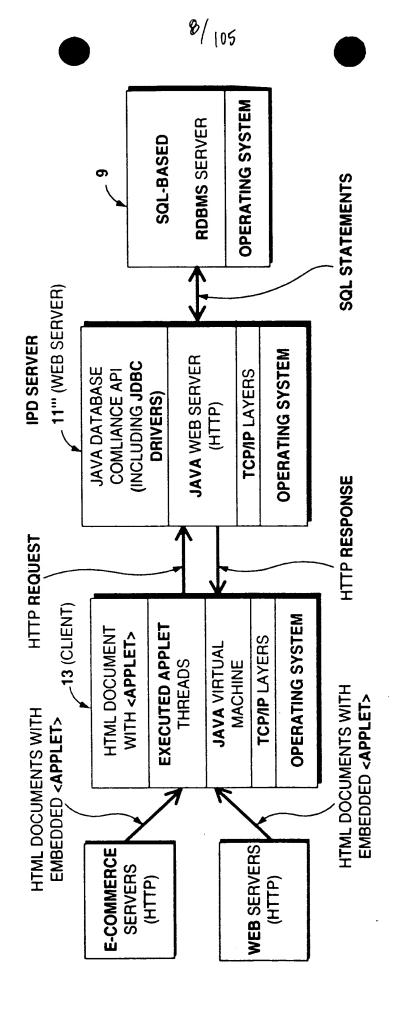
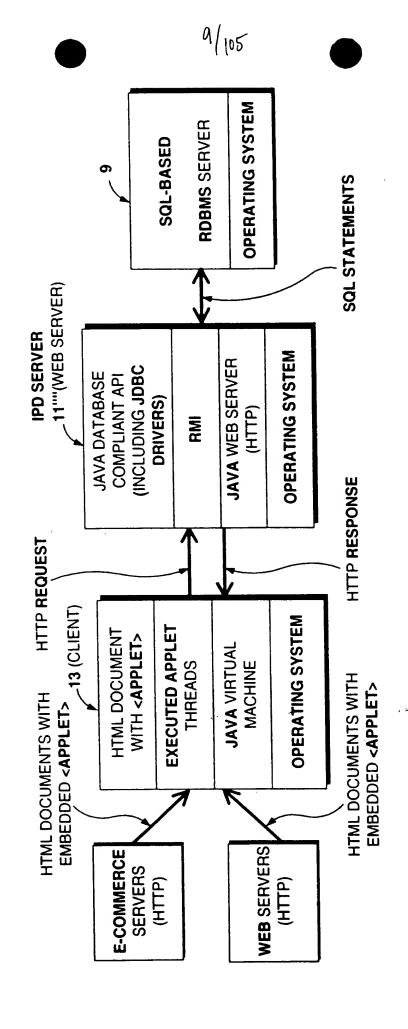
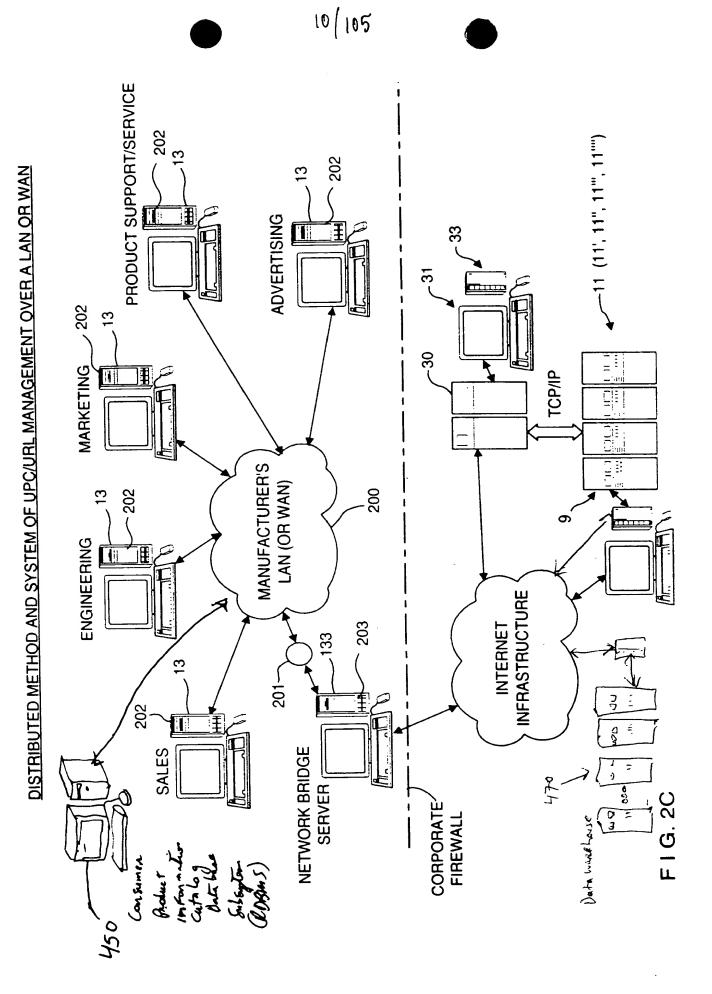


FIG. 2B3

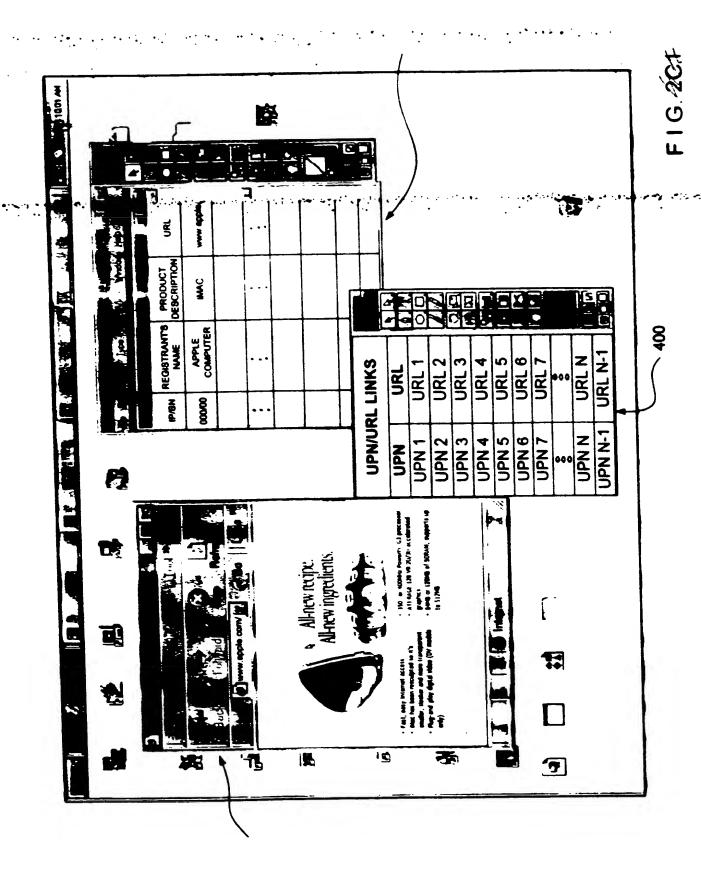
RDBMS SERVER USING CLIENT-SIDE APPLETS EMBEDDED IN HTML DOCUMENTS MECHANISM FOR ACCESSING CONSUMER PRODUCT INFORMATION FROM AND REMOTE METHOD OF INVOCATION (RMI) ON JAVA WEB SERVER



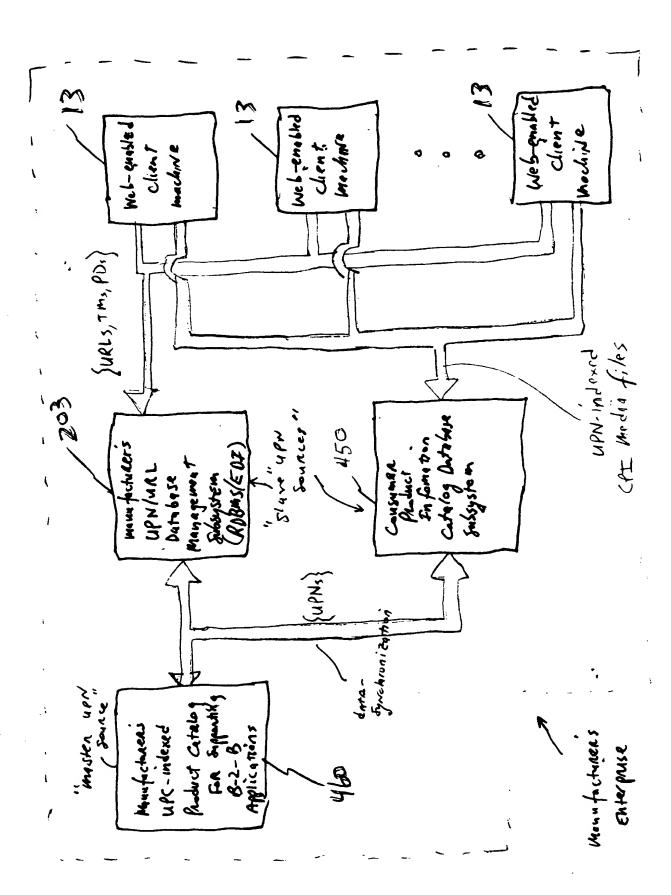
F1G. 2B4



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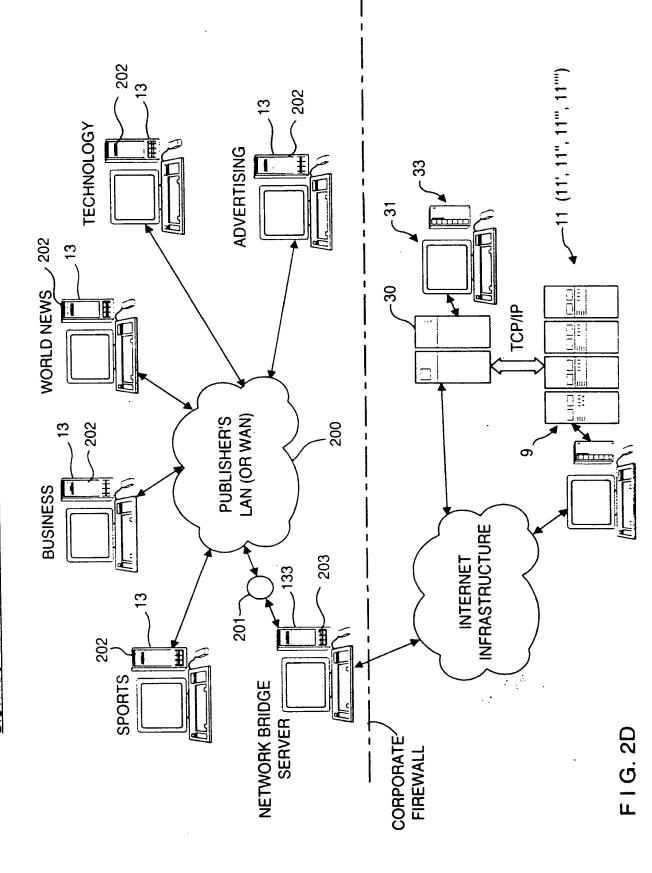


noetono cotono

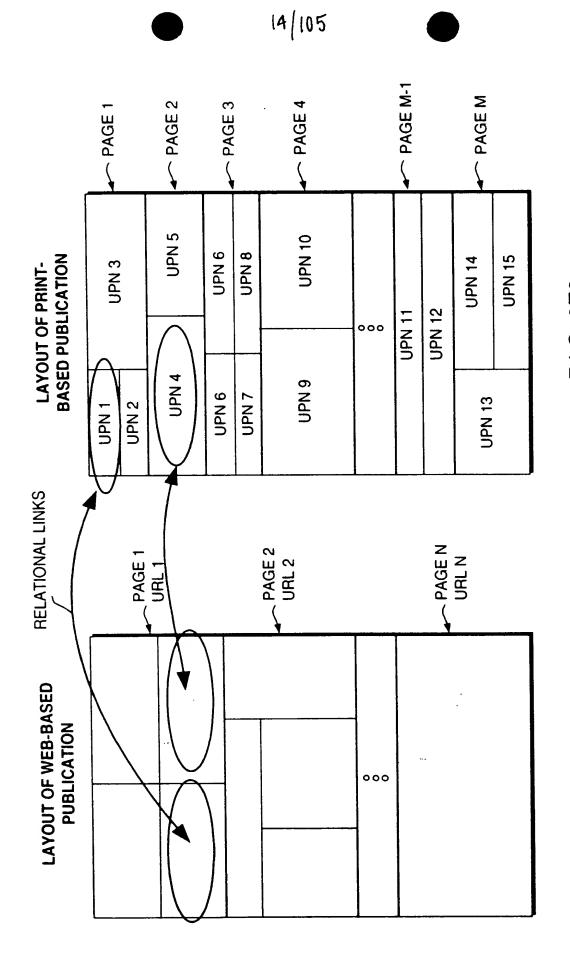


F16, 2C.2

DISTRIBUTED METHOD AND SYSTEM OF UPC/URL MANAGEMENT OVER A LAN OR WAN



13/105

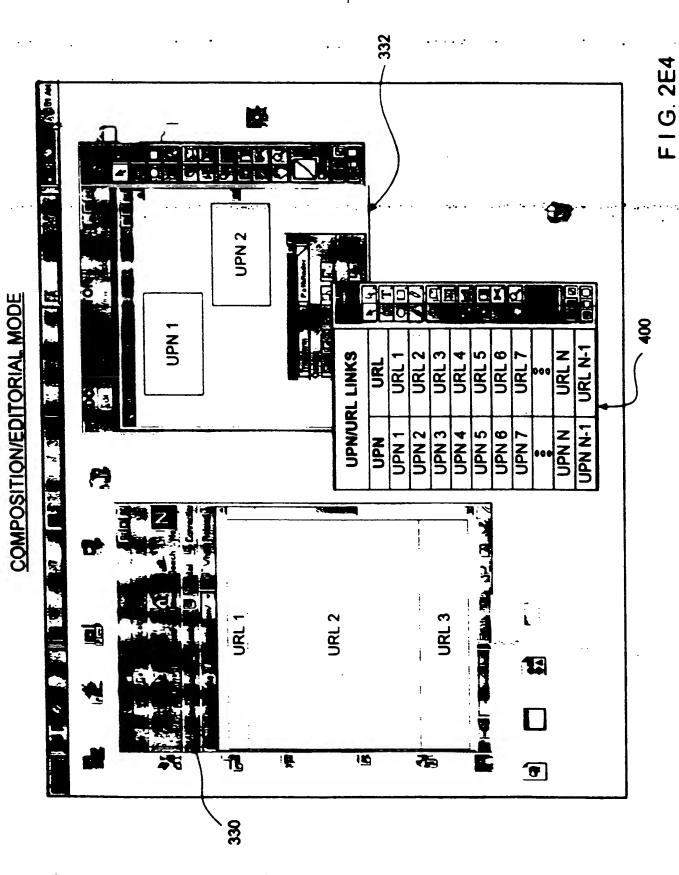


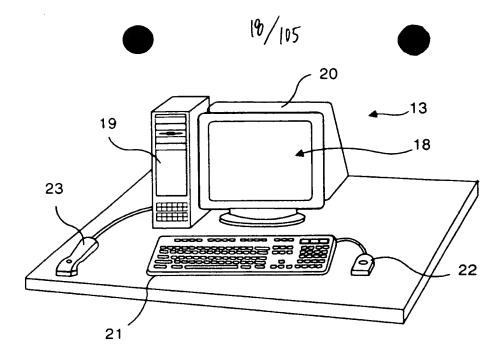
F1G. 2E1

F1G. 2E2

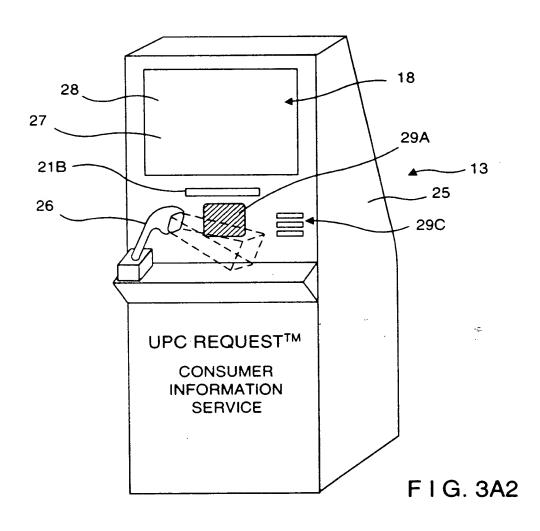
UPN/U	RL LINKS	
UPN	URL	
UPN 1	URL 1	400
UPN 2	URL 2	400
UPN 3	URL 3	
UPN 4	URL 4	
UPN 5	URL 5	
UPN 6	URL 6	
UPN 7	· URL 7	
UPN 8	URL 8	
UPN 9	URL 9	
UPN 10	URL 10	
UPN 11	URL 11	
UPN 12	URL 12	
UPN 13	URL 13	
000	000	
UPN N	URLN	
UPN N-1	URL N-1	

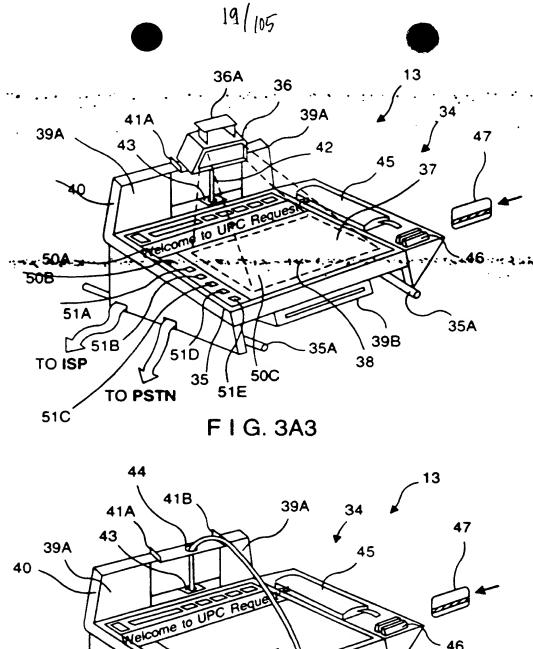
F I G. 2E3

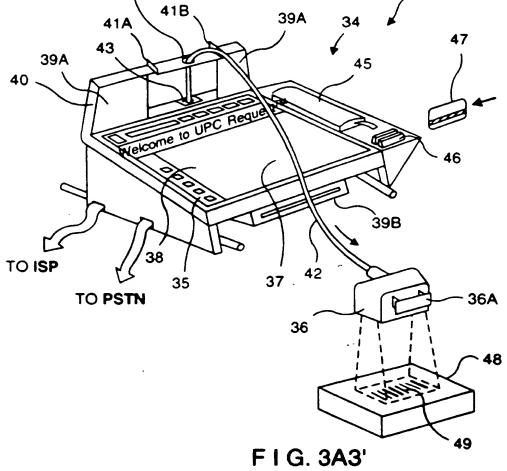


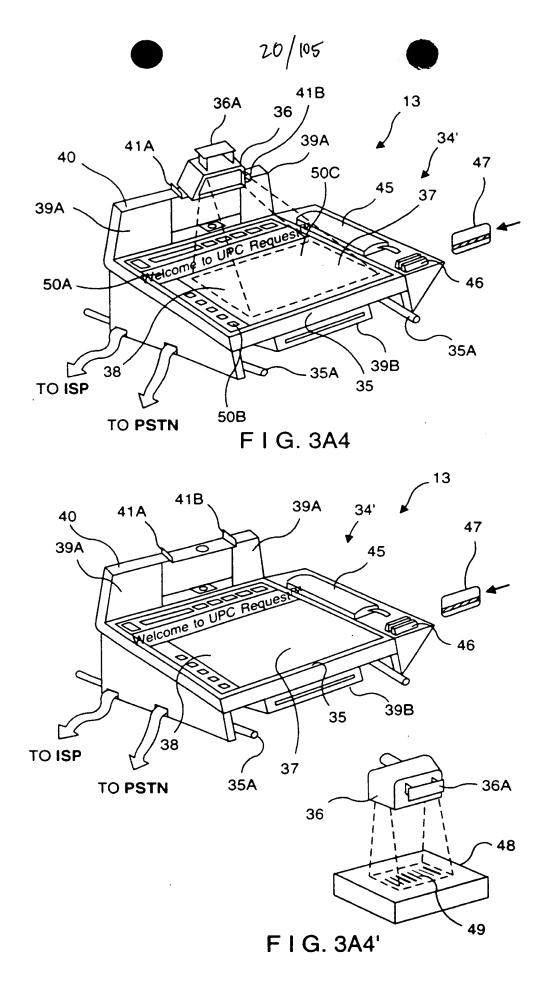


F I G. 3A1









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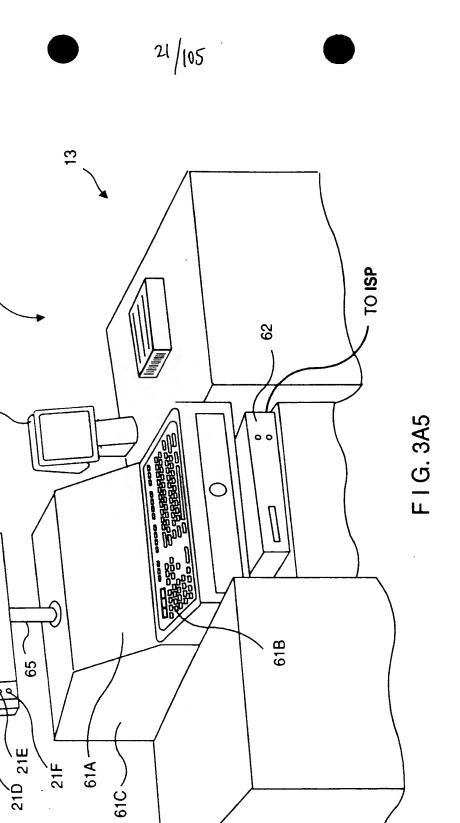
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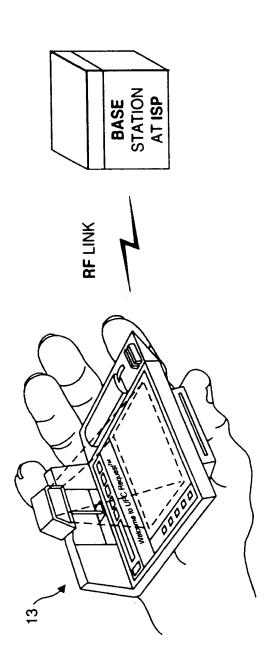
61

64

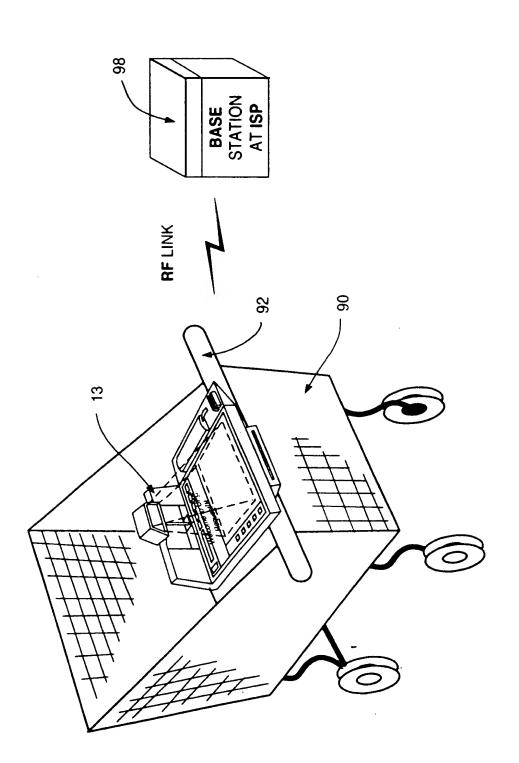
Wecome to UPC RequestTM

21A

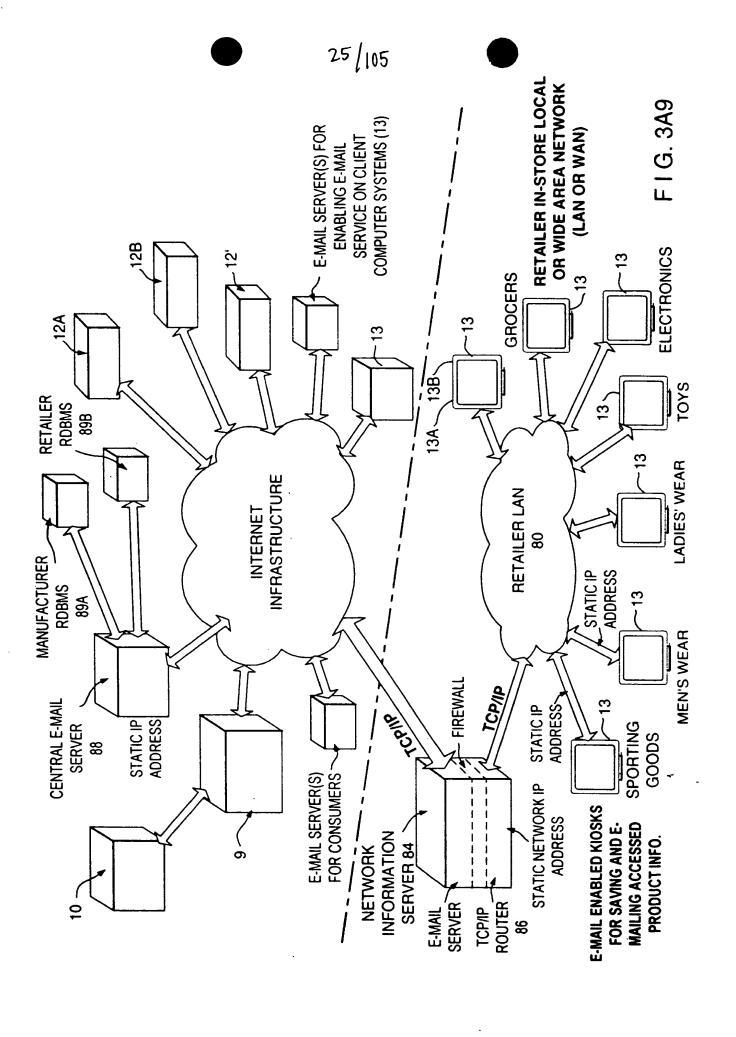


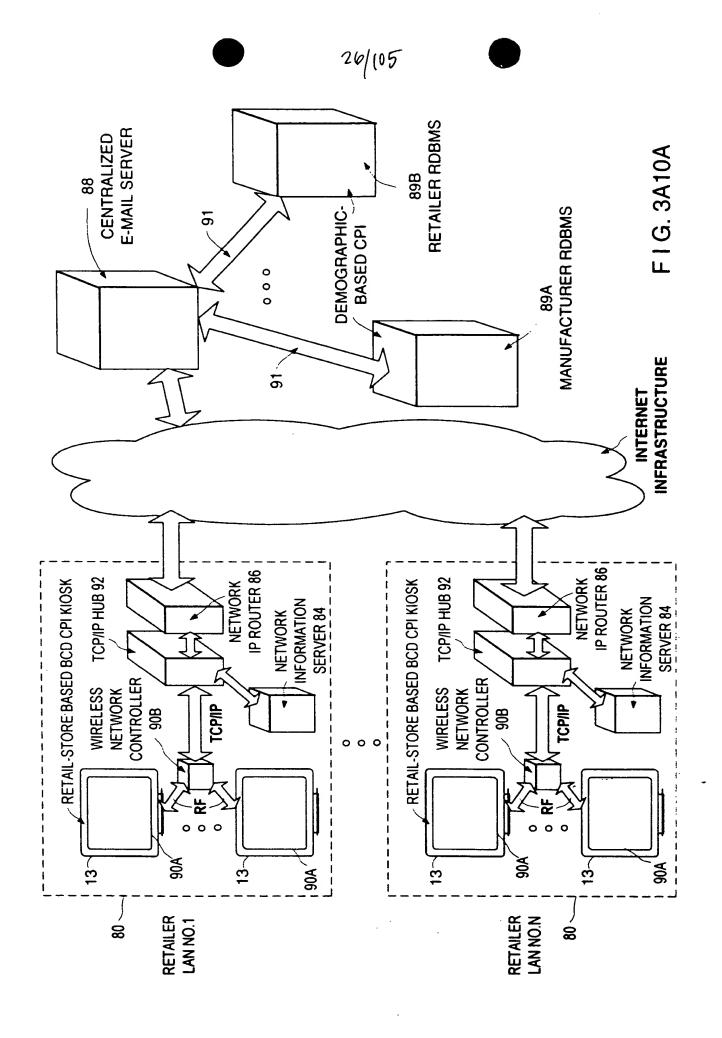


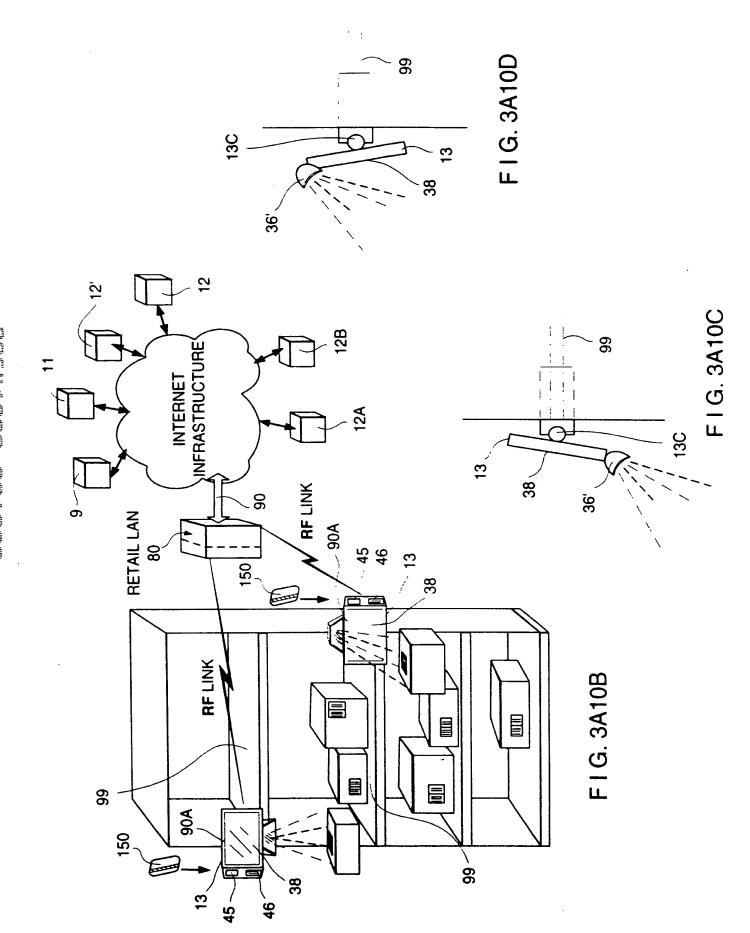
F1G.3A6



F1G.3A7







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F1G. 3A11

	2	AAINTAINED BY	MASTEF Y MANUFACTU	RER DATABA	MASTER DATABASE TABLE MAINTAINED BY MANUFACTURER DATABASE MANAGEMENT SUBSYSTEM	T SUBSYSTEM		
MANUFACTURER (MIN)	RETAIL KIOSK NO.	UPN	URL	DATE	DESTINATION E-MAIL ADDRESS	E-MAIL DELIVERY CRITERIA	CONSUMER	CONSUMER ADDRESS
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F1G. 3A12

(1) LAUNCH A CONSUMER PRODUCT INFORMATION (CPI) **CAPTURE** AND TRANSPORT APPLICATION SERVICE ON AN INTERNET ENABLED BAR CODE DRIVEN (BCD) CPI KIOSK OF THE PRESENT INVENTION CONFIGURED IN A RETAILER TCP/IP LOCAL OR WIDE AREA NETWORK DEPLOYED WITHIN A RETAIL SHOPPING ENVIRONMENT, AND (2) DISPLAY ON THE KIOSK SCREEN A CPI-TRANSPORTING "ELECTRONIC-MAIL" ENVELOPE HAVING A JAVA ENABLED GUI PROVIDED WITH i) A FIRST SINGLE-CLICK BUTTON FOR CAPTURING AND STORING AS AN HTML ENCODED DOCUMENT THEREIN, ANY CPI RELATED DOCUMENT BEING DISPLAYED ON THE BCD CPI KIOSK ii) A SECOND SINGLE-CLICK BUTTON FOR TRANSPORTING COPIES OF THE ENVELOPE TO THE E-MAIL ADDRESS OF CONSUMER iii) A CONSUMER E-MAIL ADDRESS FIELD FOR ENTERING THE E-MAIL ADDRESS OF THE CONSUMER/SHOPPER, TO WHICH A COPY OF THE E-MAIL ENVELOPE CAN BE AUTOMATICALLY SENT DURING TRANSPORT iv) A RETAILER E-MAIL ADDRESS FIELD CONTAINING A PRESENT E-MAIL ADDRESS OF THE RETAILER OPERATING THE KIOSK, INDICATING THE RETAIL STORE LOCATION, AND POSSIBLY THE RETAIL DEPARTMENT FROM WHICH THE CPI-TRANSPORTING ENVELOPE WAS SENT ON THE TIME AND DATE

ENTER THE CONSUMER E-MAIL ADDRESS INTO THE CONSUMER
E-MAIL ADDRESS FIELD OF THE ENVELOPE (e.g. BY MANUALLY
TYPING THE E-MAIL ADDRESS, READING A BAR CODED
CONSUMER IDENTIFICATION CARD HAVING THE CONSUMER'S EMAIL ADDRESS AND OTHER INFORMATION ENCODED
THEREWITHIN, OR BY READING A MAGNETIC STRIPE TYPE
CONSUMER IDENTIFICATION CARD ENCODED WITH THE SAME
OR SIMILAR INFORMATION USING A MAGNETIC STRIPE READER
INTERFACED WITH THE BCD CPI KIOSK)

OF THE ELECTRONIC MESSAGE TRANSMISSION

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F I G. 3A13A



USE THE UPN, TRADEMARK, PRODUCT DESCRIPTOR AND/OR COMPANY NAME ASSOCIATED WITH THE SOUGHT AFTER PRODUCT TO ACCESS A CONSUMER PRODUCT RELATED INFORMATION RESOURCE OF INTEREST ON THE WWW, AND DISPLAY THE SAME ON THE DISPLAY SCREEN OF THE BCD CPI KIOSK WITHIN THE RETAIL SHOPPING ENVIRONMENT

SELECT THE FIRST SINGLE-CLICK BUTTON ON THE CPI-TRANSPORTING ENVELOPE (INDICATED AS "CAPTURE, SAVE & ATTACH") SO AS TO AUTOMATICALLY CAPTURE THE CONTENTS OF A DESIRED CONSUMER PRODUCT RELATED INFORMATION RESOURCE BEING DISPLAYED ON THE DISPLAY SCREEN OF THE BCD CPI KIOSK, AND STORE THE SAME AS AN HTML ENCODED DOCUMENT ATTACHED TO THE CPI-ENABLING ENVELOPE

SEQUENTIALLY REPEAT STEPS C AND D FOR EACH CONSUMER PRODUCT INFORMATION RESOURCE ON THE WWW TO BE CAPTURED, STORED AND ATTACHED TO THE OPENED CPITRANSPORTING ENVELOPE BEING DISPLAYED ON THE DISPLAY SCREEN OF THE KIOSK (i.e. UP TO THE MAXIMUM NUMBER OF DOCUMENTS TO BE ATTACHED TO THE CPI-ENABLING ENVELOPE)

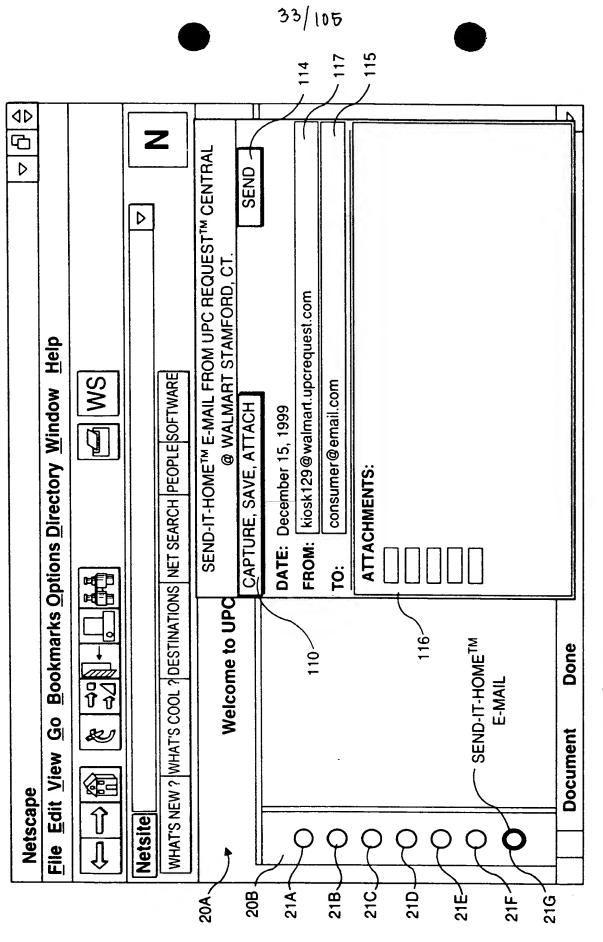
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UPON CAPTURING, STORING AND ATTACHING A DESIRED NUMBER OF CONSUMER PRODUCT RELATED INFORMATION RESOURCES TO THE CPI-TRANSPORTING ENVELOPE, SELECT THE SECOND SINGLE-CLICK BUTTON ON THE CPI-TRANSPORTING ENVELOPE SO AS TO TRANSPORT (i.e. "SEND") THE CPI-TRANSPORTING ENVELOPE TO THE E-MAIL ADDRESS ENTERED WITHIN THE CONSUMER E-MAIL ADDRESS FIELD OF THE CPI-TRANSPORTING ENVELOPE DURING STEP D, AND THEREAFTER, AUTOMATICALLY

MAINTAIN AN INFORMATION RECORD OF EACH CPI-TRANSPORTING ENVELOPE AND THE CONTENTS THEREOF ON THE E-MAIL SERVER ON EACH RETAILER TCP/IP INFORMATION NETWORK, AND TRANSPORT A COPY THEREOF TO THE CENTRAL E-MAIL SERVER



F1G. 3A14

(1) LAUNCH A CONSUMER PRODUCT INFORMATION (CPI) **CAPTURE** AND TRANSPORT APPLICATION SERVICE ON AN INTERNET ENABLED BAR CODE DRIVEN (BCD) CPI KIOSK OF THE PRESENT INVENTION CONFIGURED IN A RETAILER TCP/IP LOCAL OR WIDE AREA NETWORK DEPLOYED WITHIN A RETAIL SHOPPING ENVIRONMENT, AND (2) DISPLAY ON THE KIOSK SCREEN A CPI-TRANSPORTING "ELECTRONIC-MAIL" ENVELOPE HAVING A JAVA ENABLED GUI PROVIDED WITH i) A FIRST SINGLE-CLICK BUTTON FOR CAPTURING AND STORING AS AN HTML ENCODED DOCUMENT THEREIN, ANY CPI RELATED DOCUMENT BEING DISPLAYED ON THE BCD CPI KIOSK ii) A SECOND SINGLE-CLICK BUTTON FOR TRANSPORTING COPIES OF THE ENVELOPE TO THE E-MAIL ADDRESS OF CONSUMER

iii) A CONSUMER E-MAIL ADDRESS FIELD FOR ENTERING THE E-MAIL ADDRESS OF THE CONSUMER/SHOPPER, TO WHICH A COPY OF THE E-MAIL ENVELOPE CAN BE **AUTOMATICALLY SENT DURING TRANSPORT** IF ENABLED BY THE CONSUMER/SHOPPER iv) A RETAILER E-MAIL ADDRESS FIELD CONTAINING A PRESENT E-MAIL ADDRESS OF THE RETAILER OPERATING THE KIOSK, INDICATING THE RETAIL STORE LOCATION. AND

POSSIBLY THE RETAIL DEPARTMENT FROM WHICH THE CPI-TRANSPORTING ENVELOPE WAS SENT ON THE TIME AND DATE OF THE ELECTRONIC MESSAGE TRANSMISSION

ENTER THE CONSUMER E-MAIL ADDRESS INTO THE CONSUMER E-MAIL ADDRESS FIELD OF THE ENVELOPE (e.g. BY MANUALLY TYPING THE E-MAIL ADDRESS, READING A BAR CODED CONSUMER IDENTIFICATION CARD HAVING THE CONSUMER'S E-MAIL ADDRESS AND OTHER INFORMATION ENCODED THEREWITHIN, OR BY READING A MAGNETIC STRIPE TYPE CONSUMER IDENTIFICATION CARD ENCODED WITH THE SAME OR SIMILAR INFORMATION USING A MAGNETIC STRIPE READER INTERFACED WITH THE BCD CPI KIOSK)

F I G. 3A15A



USE THE UPN, TRADEMARK, PRODUCT DESCRIPTOR AND/OR COMPANY NAME ASSOCIATED WITH THE SOUGHT AFTER PRODUCT TO ACCESS A CONSUMER PRODUCT RELATED INFORMATION RESOURCE OF INTEREST ON THE WWW, AND DISPLAY THE SAME ON THE DISPLAY SCREEN OF THE BCD CPI KIOSK WITHIN THE RETAIL SHOPPING ENVIRONMENT

SELECT THE FIRST SINGLE-CLICK BUTTON ON THE CPITRANSPORTING ENVELOPE (INDICATED AS "CAPTURE & RECORD") SO AS TO AUTOMATICALLY CAPTURE THE URL OF A DESIRED CONSUMER PRODUCT RELATED INFORMATION RESOURCE BEING DISPLAYED ON THE DISPLAY SCREEN OF THE BCD CPI KIOSK, AND RECORD THE SAME WITH THE MESSAGE FIELD OF THE CPI-ENABLING ENVELOPE

SEQUENTIALLY REPEAT STEPS C AND D FOR EACH CONSUMER PRODUCT INFORMATION RESOURCE ON THE WWW WHOSE URL IS TO BE CAPTURED AND RECORDED TO THE OPENED CPITRANSPORTING ENVELOPE BEING DISPLAYED ON THE DISPLAY SCREEN OF THE KIOSK

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FIG. 3A15B

D

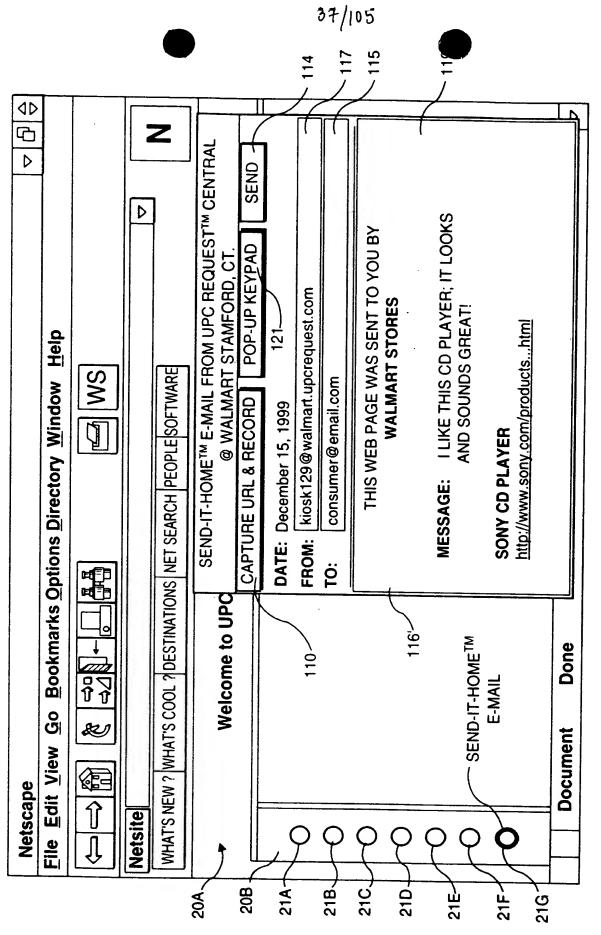
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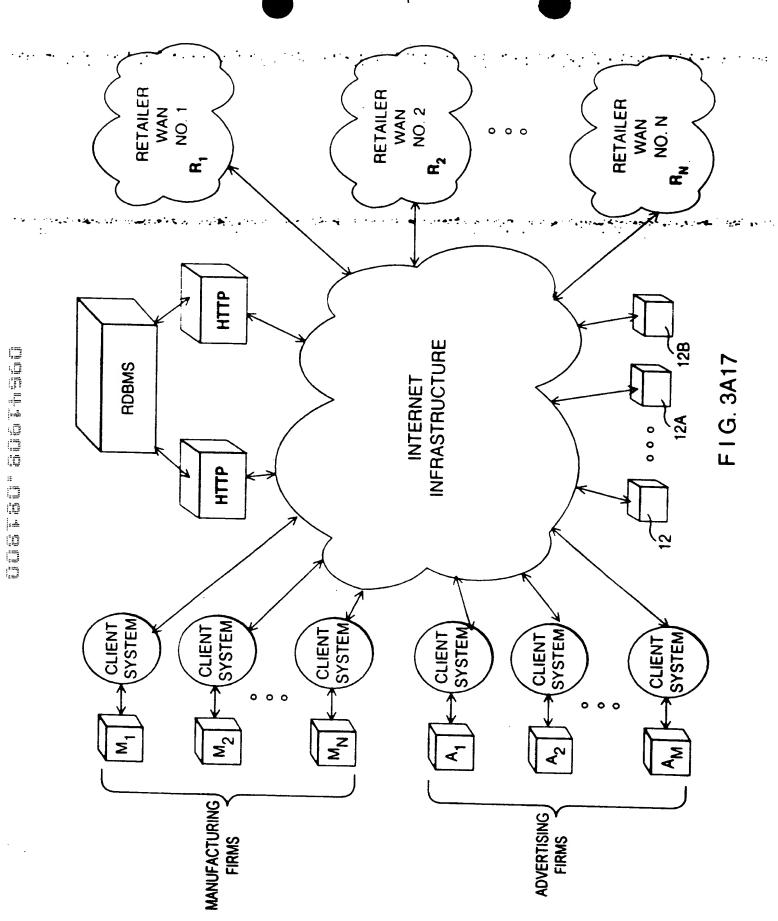
UPON CAPTURING AND RECORDING THE URLS OF A DESIRED NUMBER OF CONSUMER PRODUCT RELATED INFORMATION RESOURCES TO THE CPI-TRANSPORTING ENVELOPE, SELECT THE SECOND SINGLE-CLICK BUTTON ON THE CPI-TRANSPORTING ENVELOPE SO AS TO TRANSPORT (i.e. "SEND") THE CLOSED AND SEALED CPI-TRANSPORTING ENVELOPE TO THE E-MAIL ADDRESS ENTERED WITHIN THE CONSUMER E-MAIL ADDRESS FIELD OF THE CPI-TRANSPORTING ENVELOPE DURING STEP D, AND THEREAFTER, AUTOMATICALLY

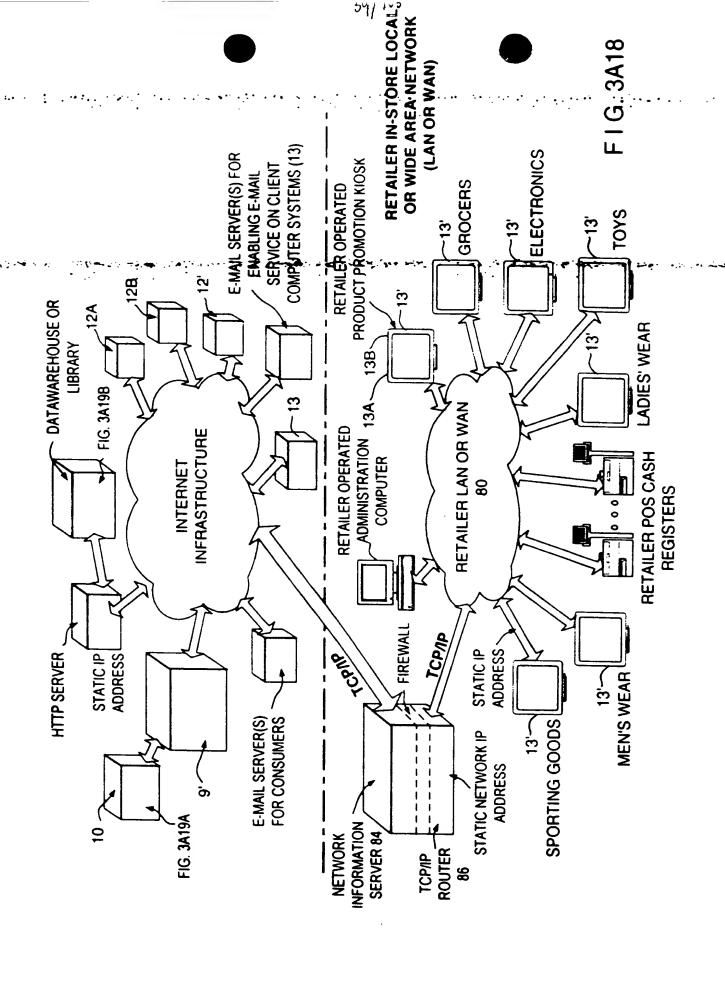
MAINTAIN AN INFORMATION RECORD OF EACH CPI-TRANSPORTING ENVELOPE AND THE CONTENTS THEREOF ON THE E-MAIL SERVER ON EACH RETAILER TCP/IP INFORMATION NETWORK, AND TRANSPORT A COPY THEREOF TO THE CENTRAL E-MAIL SERVER

G



F1G. 3A16





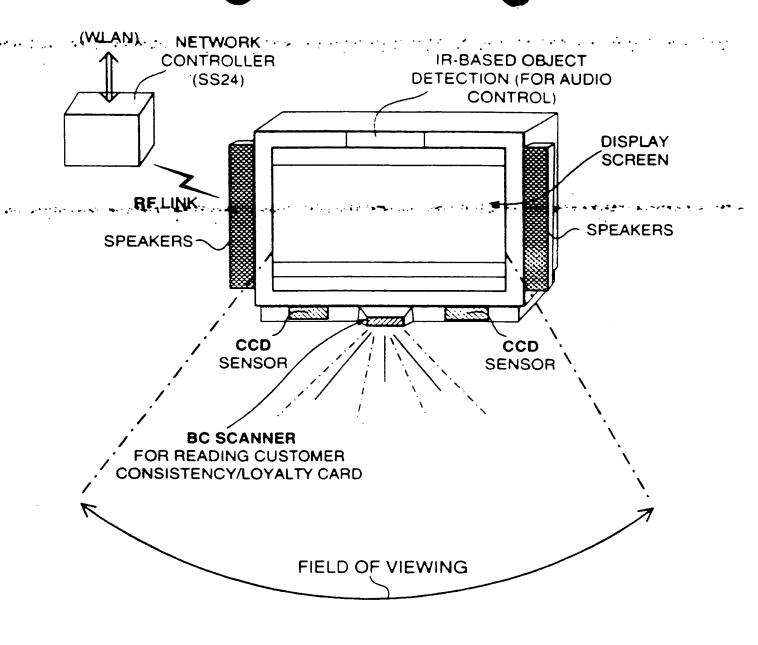
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	URL NO. 1		·							•••	
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F1G. 3A19A

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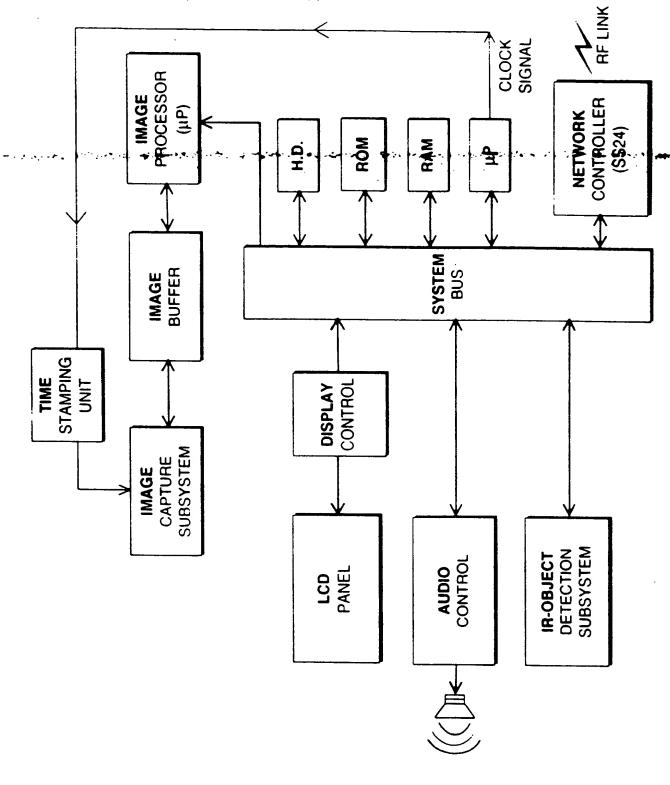
F1G. 3A19B



FEATURES:

- EYE TRAINING AND ACCOUNTING SUBSYSTEM
- TRACKS DETECTED EYEBALL

F I G. 3A19C



DOGLIGOS JOLIGOS

F1G. 3A19D

DISPLAY FRAME FOR DISPLAYING THE LOCATION OF THE ADVERTISED PRODUCT IN THE DISPLAY FRAME FOR DISPLAYING A PRODUCT ADVERTISEMENT CREATED ABOUT THE ADVERTISED PRODUCT, SELECTED BY RETAILER (URL-DIS) DISPLAY FRAME FOR DISPLAYING THE **RETAILER'S IDENTITY/IMAG**像 DISPLAY FRAME FOR DISPLAYING A PROMOTIONAL MESSAGE RETAIL STORE OR IN THE RETAILER'S ELECTRONIC STORE, BY MANUFACTURER AND/OR AGENT THEREOF (URL-DF2), SELECTED BY RETAILER (URL-DF1) SELECTED BY RETAILER (URL-DF4) AND SELECTED BY RETAILER

F & G. 3A21A

. . .

EACH MANUFACTURER OR AGENT THEREOF CREATE AN INFORMATION RESOURCE FILE (IRF) FOR EACH UPN ASSIGNED PRODUCT IN ITS LINE, DESCRIBING, ADVERTISING, OR OTHERWISE PROMOTING THE PRODUCT

TRANSPORT THE IRF TO AN INTERNET INFORMATION
SERVER FOR STORAGE AT A LOCATION WITHIN THE
SERVER SPECIFIED BY A URL LINKED TO
THE UPN OR THE PRODUCT

INSTALL THE PRODUCT PROMOTION KIOSKS WITHIN A RETAIL SHOPPING ENVIRONMENT

USE RETAIL ADMINISTRATION CLIENT TO PROGRAM:

(i) THE PRODUCT ADVERTISEMENTS TO BE DISPLAYED IN THE ADVERTISEMENT DISPLAY FRAME OF A PARTICULAR PRODUCT PROMOTION KIOSK IN THE RETAIL SHOPPING ENVIRONMENT (e.g. FOR A GIVEN PERIOD OF TIME);

(ii) THE PROMOTIONAL MESSAGE (e.g. 20% DISCOUNT) TO

BE DISPLAYED IN THE PROMOTIONAL FRAME THEREOF;
(iii) THE LOCATION OF THE PRODUCT IN THE STORE
(e.g. STORE SECTION. OR CATEGORY)

F I G. 3A22A

- B

- D

PRODUCT ADVERTISEMENTS, PROMOTIONS AND PRODUCT LOCATIONS OF PRODUCT PROMOTION KIOSKS THROUGHOUT THE RETAIL SHOPPING ENVIRONMENT IN ACCORDANCE WITH THE SCHEDULE PROGRAMMED BY THE RETAILER ADMINISTRATION CLIENT

DURING PRODUCT PROMOTION DISPLAY, **COLLECT** INFORMATION REGARDING:

- (i) THE **NUMBER OF EYES** LOOKING AT EACH PRODUCT ADVERTISEMENT OR A PARTICULAR PRODUCT PROMOTION KIOSK, AND
 - (ii) THE NUMBER OF PRODUCTS SOLD IN THE RETAIL SHOPPING ENVIRONMENT ON A PARTICULAR DAY

REPROGRAM THE PRODUCT PROMOTION KIOSKS IN RESPONSE TO THE INFORMATION COLLECTED AT BLOCK F SO AS TO ARCHIVE THE PRODUCT PROMOTION GOODS WITHIN THE RETAIL SHOPPING ENVIRONMENT

FIG. 3A22B

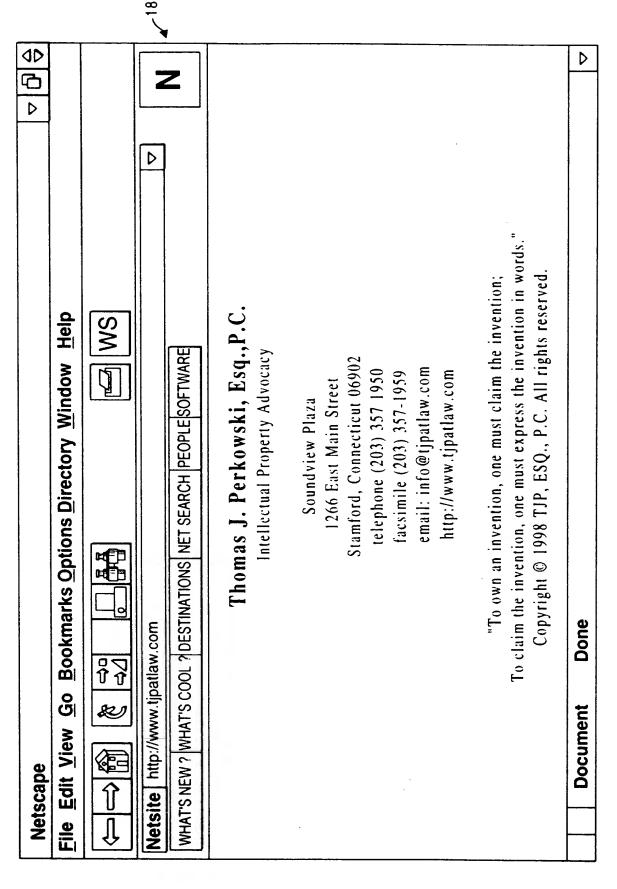
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SAMMING TABLE	F1 URL-DF2 CHL-DF3 URL-DF4	.,,	A		Set Y					
PRODUCT PROMOTION PROGRAMMING TABLE	STATIC IP URL-DF1								•••	
PRODL	RETAILER KIOSK	ON							•••	
	DATE:	TIME (INTERVALS)							•••	

# OF UPN SOLD ON 4TH DATE						•	
# OF UPN SOLD ON 3RD'DATE	- 2., - 1	, , ,	ų ·	*.**	• •	•	S. A.
# OF UPN SOLD ON 2ND DATE							
# OF UPN SOLD ON SAME DATE							
URL/AD			·		-		
EYE COUNTS							
TIME/DATE							
UPN (PRODUCT)							

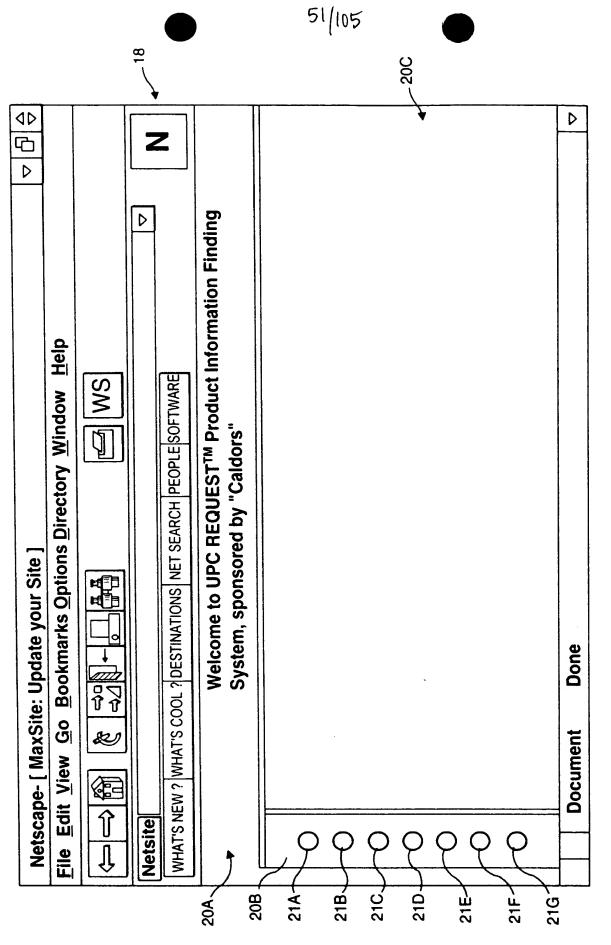
F1G. 3A2

REPORT



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FIG. 3B



F1G.3C

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NS / dI	REGISTRANT'S NAME AND ADDRESS	PRODUCT DESCRIPTION	UNIFORM RESOURCE LOCATOR (URL)	TRADE/ SERVICE MARKS	e-mail ADDRESS	CPIR APPLETS	STATUS
7/18908/17674/0	APPLE COMPUTER, INC. CUPERTINO, CA.	POWER MAC 7600/120 COMPUTER	http://www.power.com/pc	POWER MAC			
0/373/100/6	PROCTOR & GAMBLE	TOOTH PASTE	http://www.tooth.com/pc	CREST			
3/12547/68404/0	WARNER WELCOME	ACID REDUCER	http://www.zantac.com/pc	ZANTAC ZANTAC 75			
0/00005/17643/4	KODAK, INC.	FILM PROCESSING	http://www.kodak.com/pc	KODAK			
•••	•••	•••	•••	•••	•••	•••	•••
0/27242/51057/9	SONY, INC.	PERSONAL COMPUTER	http://www.sony.com/pc	SONY			

F I G. 4A1

CONSUMER PRODUCT INFO. REQUEST, CPIR-ENABLING APPLET LIBRARY

PRODUCT ADVERTI- SEMENT INFORMATION FIELD		• • •	
MISCELLA- NEOUS INFORMATION FIELD		• • •	
PRODUCT MISCELLA- REVIEW NEOUS INFORMATION FIELD FIELD		. • • •	
PRODUCT INCENTIVE INFORMATION FIELD			
PRODUCT WARRANTY / SERVING INFORMATION FIELD		•••	
PRODUCT UPDATE INFORMATION FIELD			
URL; SPECIFICATION UPDATE INFORMATION FIELD FIELD		• • •	
URL		•••	

FIG. 4A2

IP/SN	REGISTRANT'S NAME AND ADDRESS	PRODUCT DESCRIPTION	TRADE/SERVICE MARKS	E-MAIL ADDRESS	STATUS
7/05089/37460/7	NETSCAPE COMMUNICATIONS CORP.	INTERNET	NETSCAPE, NAVIGATOR		
			/		
0/30000/01020/4	QUAKER, INC.	OATMEAL	QUAKER		
0/496/390/1	COLA COLA, INC.	COCA SODA	COCA - COLA, COKE		
0/7599/24245/2	WARNER BROS.	PAT METHANY AUDIO CD	GEFFEN		
•••	•••	•••	•••		

FIG. 4B

		The Copy Broduct		Manufacturer	
Manufacturer		Soll Sallies Loader	,	Company Name	
Company Name		UPC Number	↓	Street Address	
Company Ivanie	4	Company Name	$\overline{\Psi}$, iji	
Street Address	∢		J		
City	٨	Manufacturer ID Number A	,	State	(
State	A	Manufacturer Product Number A		Postal Code	
Postal Code	⋖	Manufacturer Website URL A		Country)
Country	⋖	Product Description T		Manufacturer ID Number	
Manufacturer ID Number	۷	ightharpoons		Contact Person	
Contact Person	۷	□ Information Resources on the WW □		Phone Number	
Phone Number	⋖		T	E-Mail	
E-Mail	٨			Domain Name	5
Domain Name	⋖	Jrer ID Number		Website Creation Date	5 /
Website Creation Date	0	Souct Number	$\overline{}$	Website Existence	105
Website Existence	A	Company Name		Manufacturer Website URL	-
Manufacturer Website URL	A	OUT 101 Floadet Description			
				FIG. 4C1	

FIG. 4C

Consumer Product

UPC Number
Company Name
Manufacturer ID Number
Manufacturer Product Number
Manufacturer Website URL
Product Description
Primary Trademark
Secondary Trademark
Package Type
UPC Symbol Type
Website Marking on Package

FIG. 4C2

URL For Company Stock Purchase JRL For Company Annual Report **URL For Direct Product Purchase JRL For Complementary Product URL For Complementary Product** JRL For Complementary Product **URL For WWW Advertisement URL For Product Retailer No.2 URL For Product Retailer No.3 URL For WWW Advertisement JRL For WWW Advertisement** JRL For Product Retailer No.1 Info. Resources on WWW Manufacturer Product Number **URL For Product Description URL For Product Wholesaler URL For Product Wholesaler URL For Product Wholesaler URL For Warranty Service** JRL For Product Manual Manufacturer ID Number Company Name UPC Number

FIG. 4C3

RETAILER

Company Name

Street Address

City

State

Postal Code

Country

Manufacturer ID Number

Contact Person

Phone Number

E-Mail

Domain Name

Website Creation Date

Website Existence

Manufacturer Website URL

Manufacturer No. 1

Manufacturer No. 2

Manufacturer No. 3

Manufacturer No. 4

Manufacturer No. 5

Manufacturer No. 6

Manufacturer No. 7

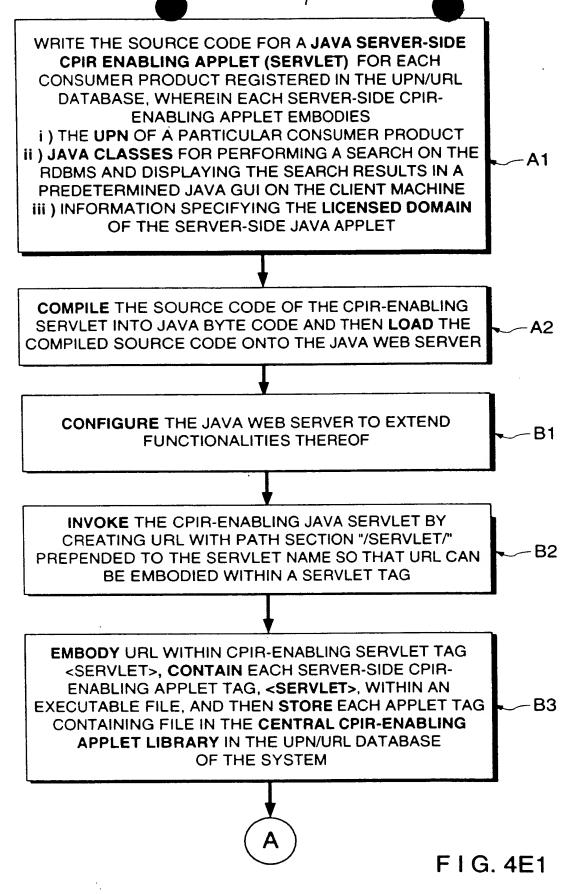
Manufacturer No. 8

Manufacturer No. 9

Manufacturer No. 10

Manufacturer No. N

FIG. 4D



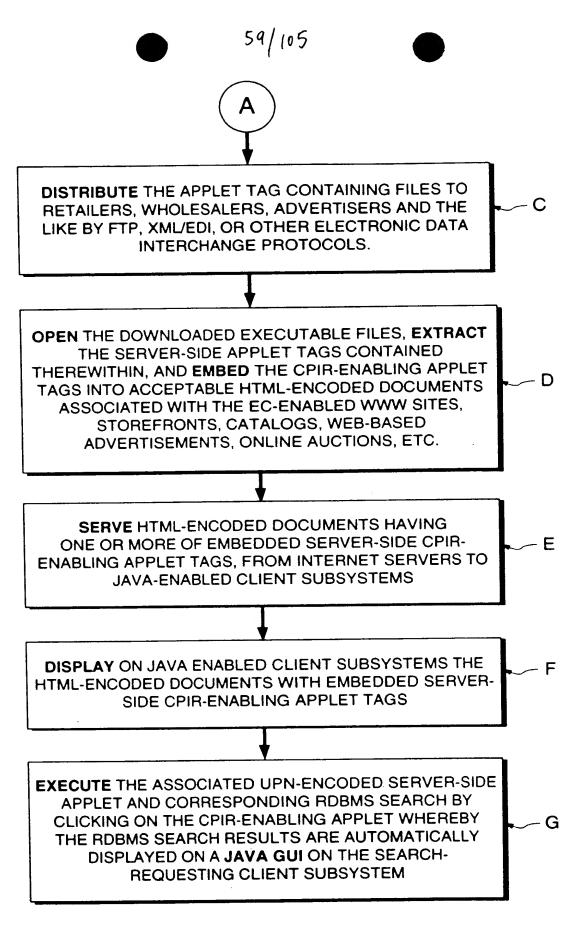
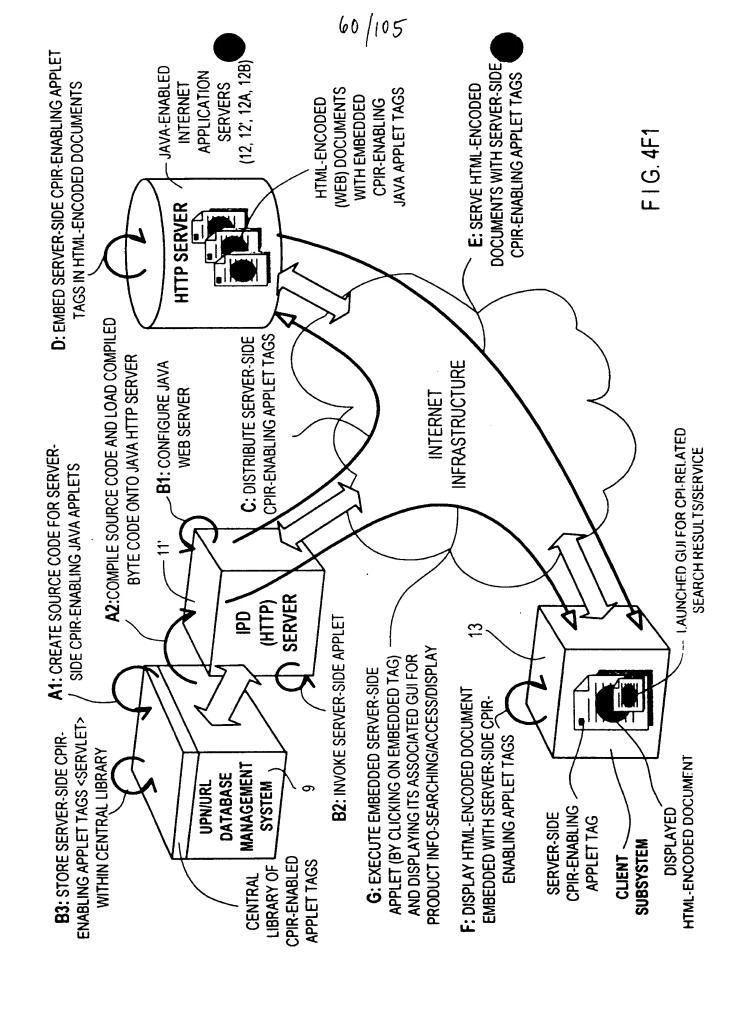
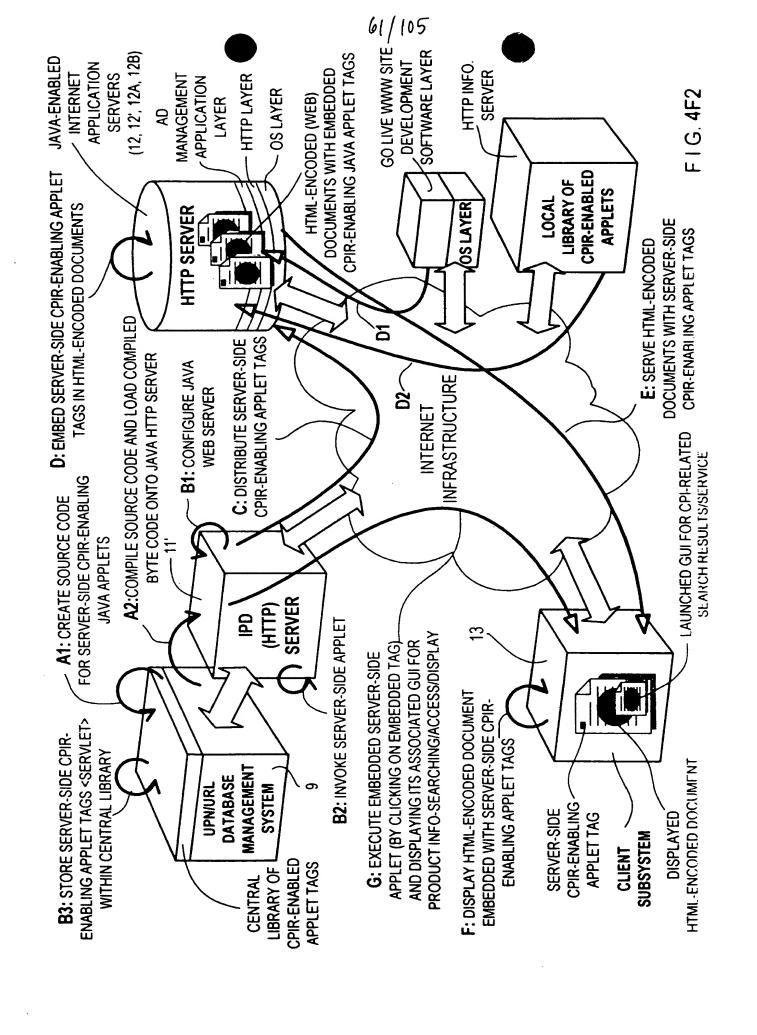
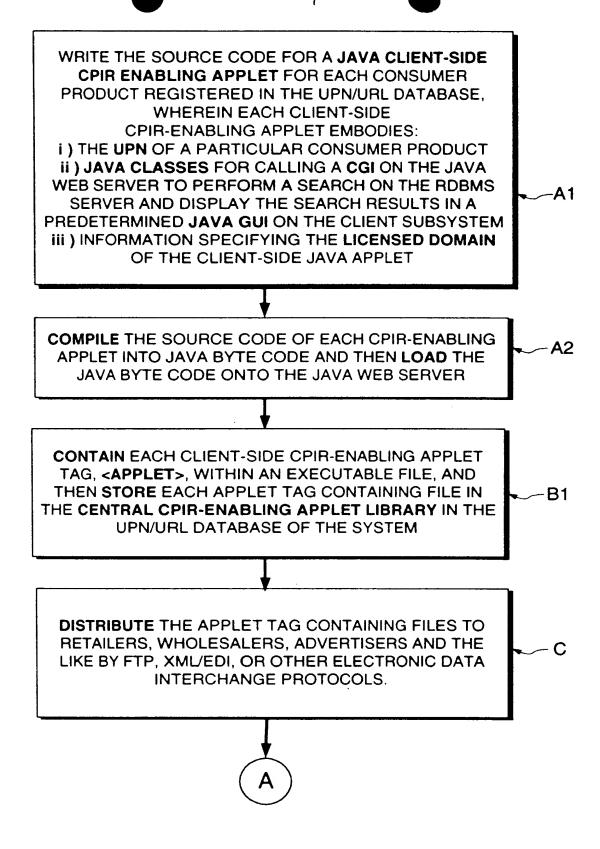


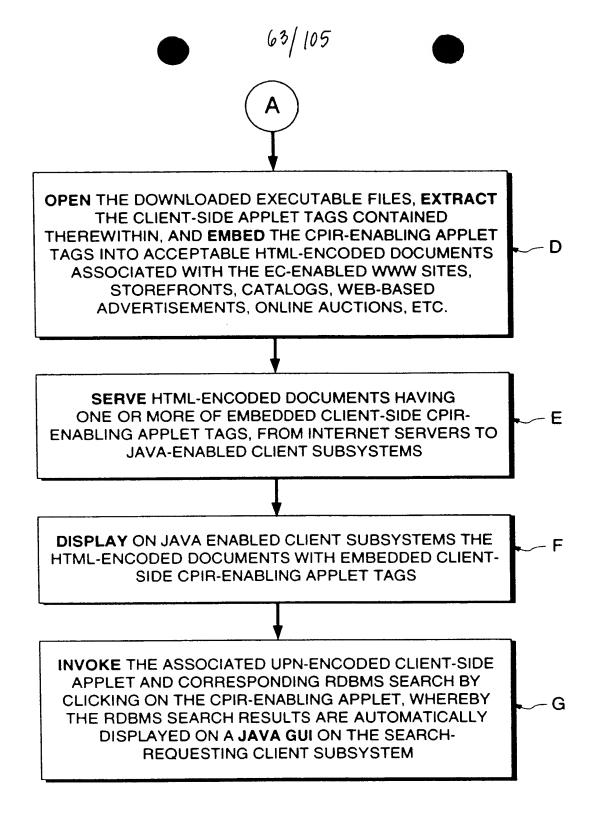
FIG. 4E2



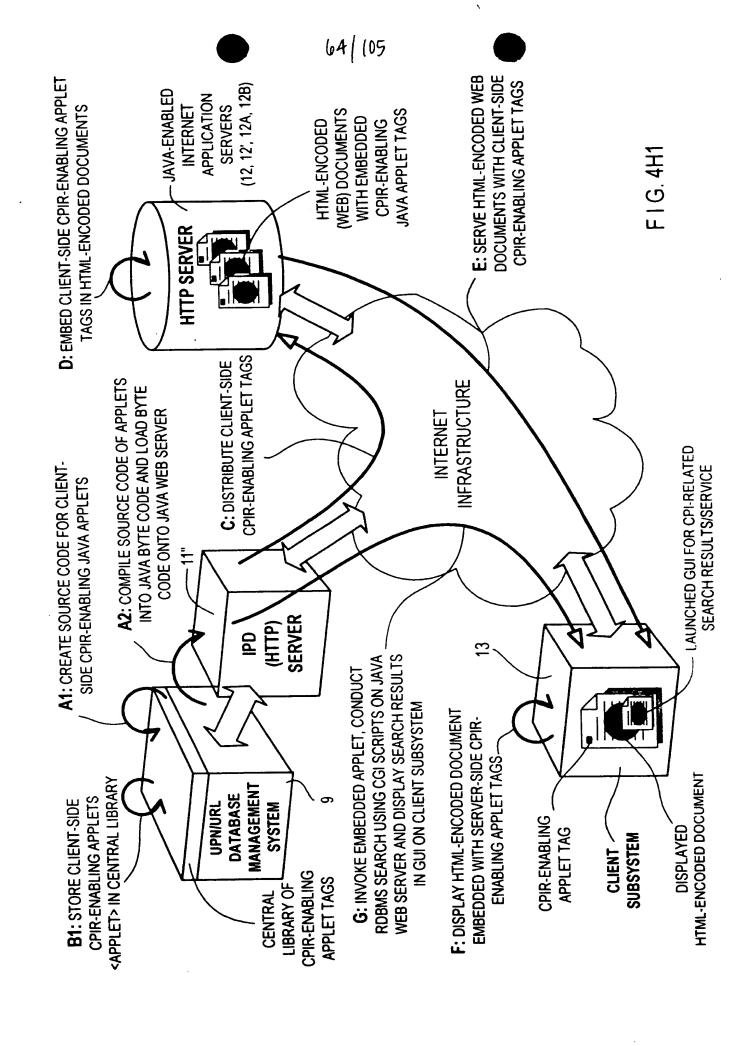


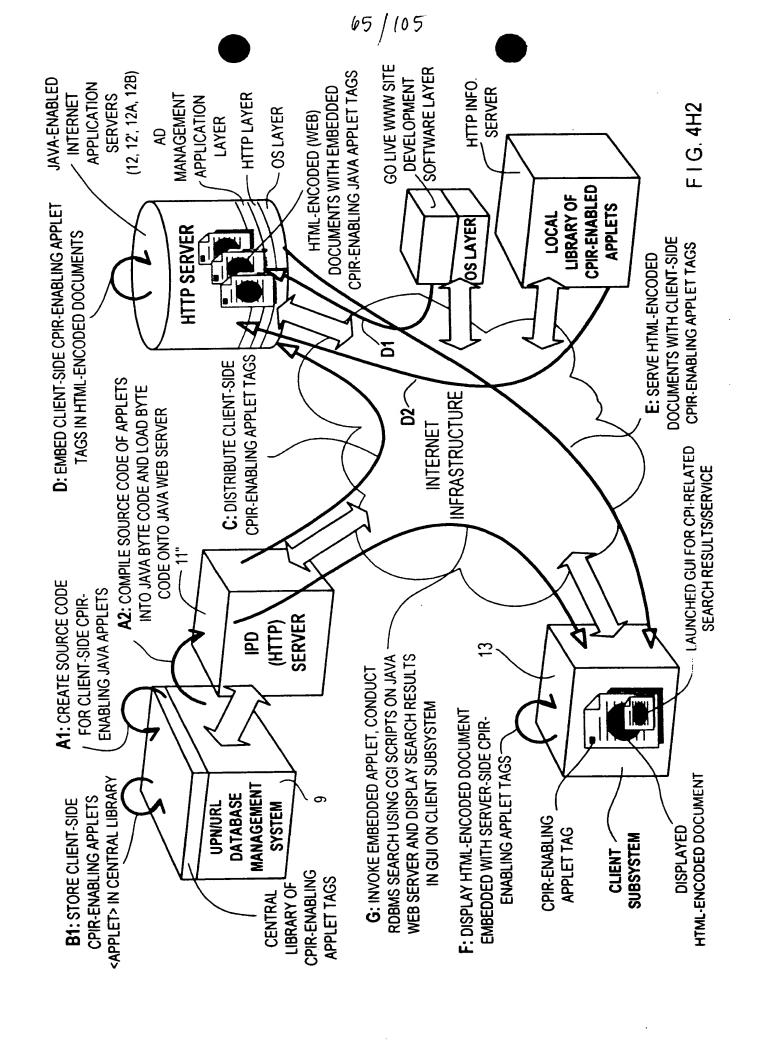


F I G. 4G1



F I G. 4G2





WRITE THE SOURCE CODE FOR A JAVA CLIENT-SIDE CPIR ENABLING APPLET FOR EACH CONSUMER PRODUCT REGISTERED IN THE UPN/URL DATABASE, WHEREIN EACH CLIENT-SIDE CPIR-ENABLING APPLET EMBODIES:

i) THE UPN OF A PARTICULAR CONSUMER PRODUCT

ii) JAVA CLASSES FOR CREATING A SOCKET CONNECTION BETWEEN THE CLIENT SYSTEM AND JAVA WEB SERVER AND TO PERFORM A SEARCH ON THE RDBMS SERVER, AND DISPLAYING THE SEARCH RESULTS IN A PREDETERMINED JAVA GUI ON THE CLIENT SUBSYSTEM

iii) INFORMATION SPECIFYING THE LICENSED DOMAIN OF THE CLIENT-SIDE JAVA APPLET

COMPILE THE SOURCE CODE OF EACH CPIR-ENABLING APPLET INTO JAVA BYTE CODE AND THEN LOAD THE JAVA BYTE CODE ONTO THE JAVA WEB SERVER

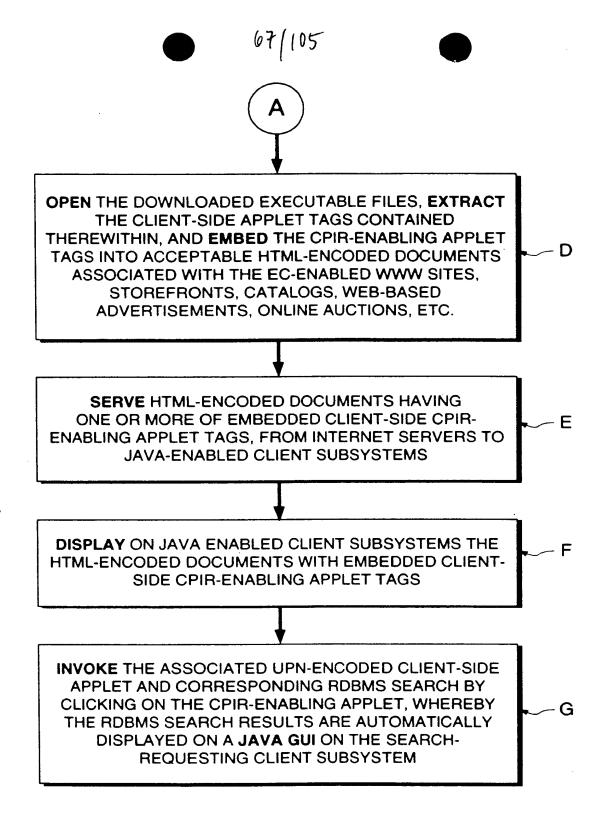
-A2

B1

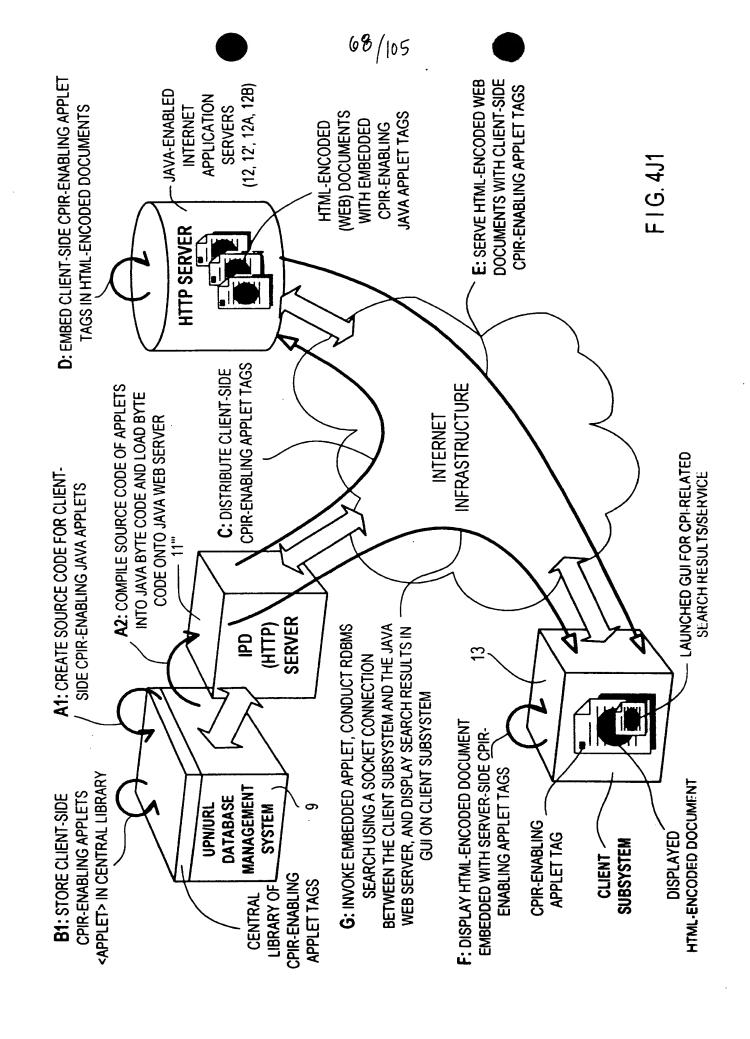
CONTAIN EACH CLIENT-SIDE CPIR-ENABLING APPLET TAG, <APPLET>, WITHIN AN EXECUTABLE FILE, AND THEN STORE EACH APPLET TAG CONTAINING FILE IN THE CENTRAL CPIR-ENABLING APPLET LIBRARY IN THE UPN/URL DATABASE OF THE SYSTEM

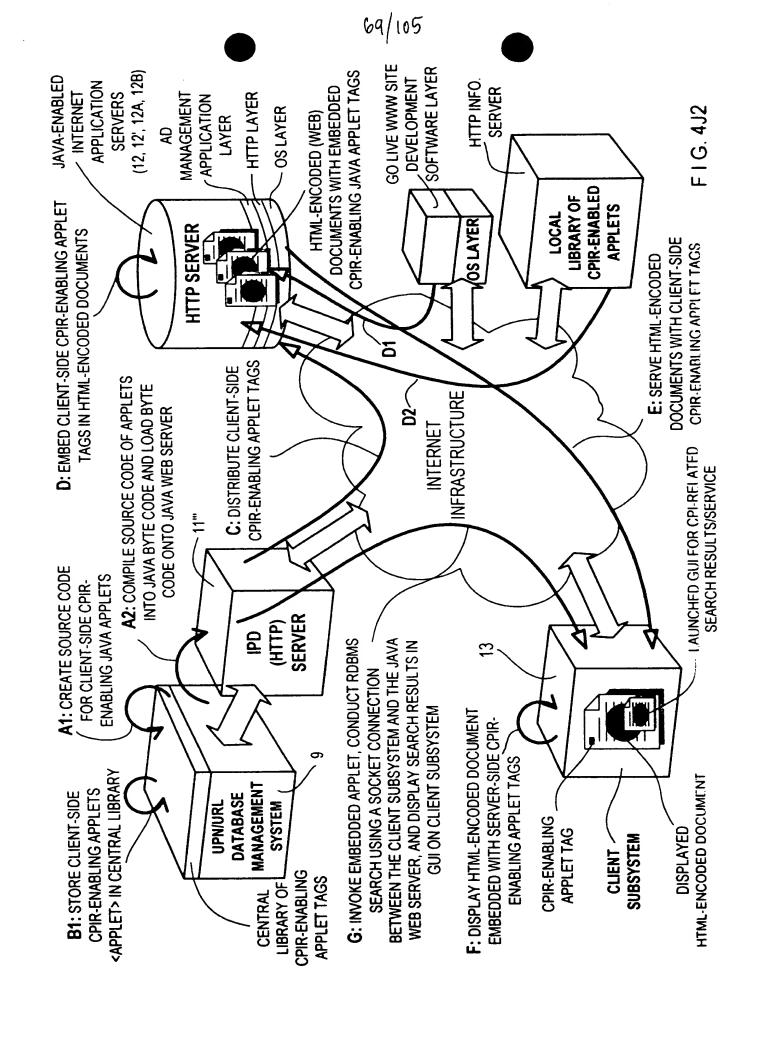
DISTRIBUTE THE APPLET TAG CONTAINING FILES TO RETAILERS, WHOLESALERS, ADVERTISERS AND THE LIKE BY FTP, XML/EDI, OR OTHER ELECTRONIC DATA INTERCHANGE PROTOCOLS.

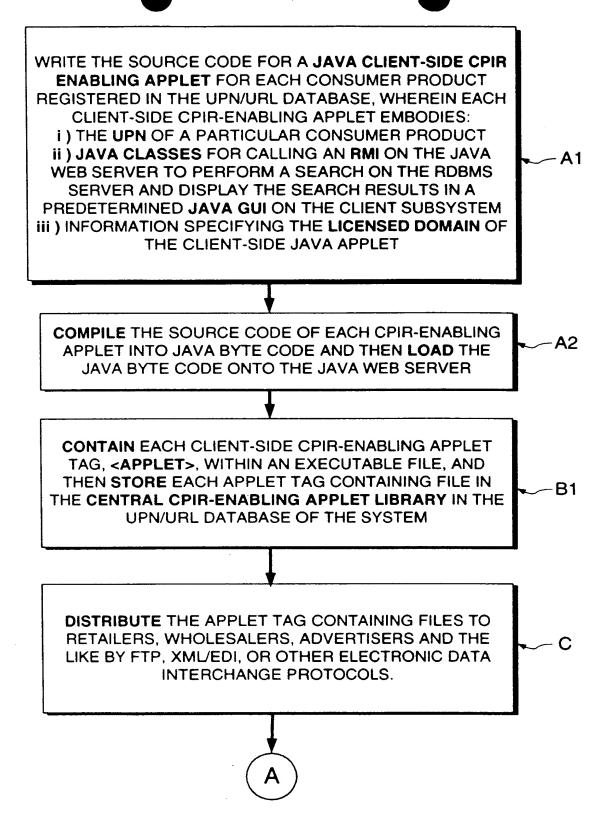
F I G. 411



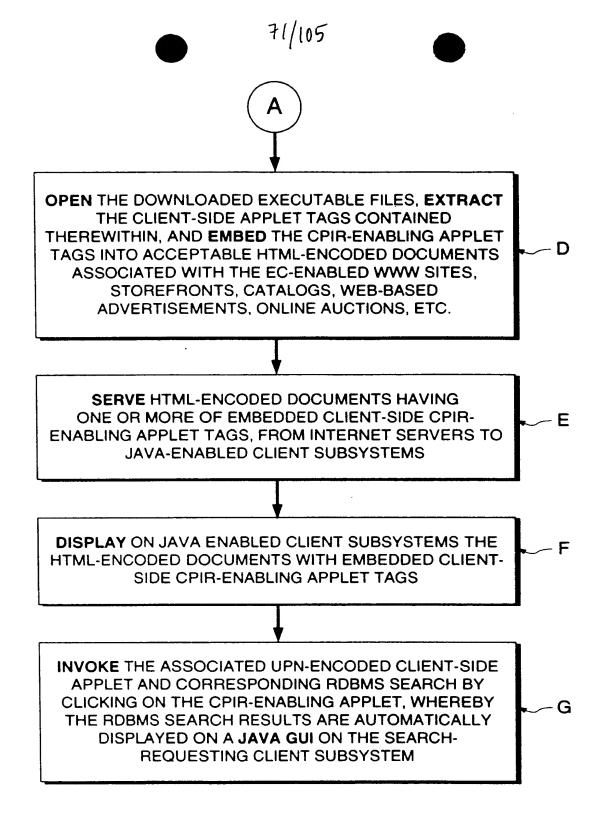
F I G. 412



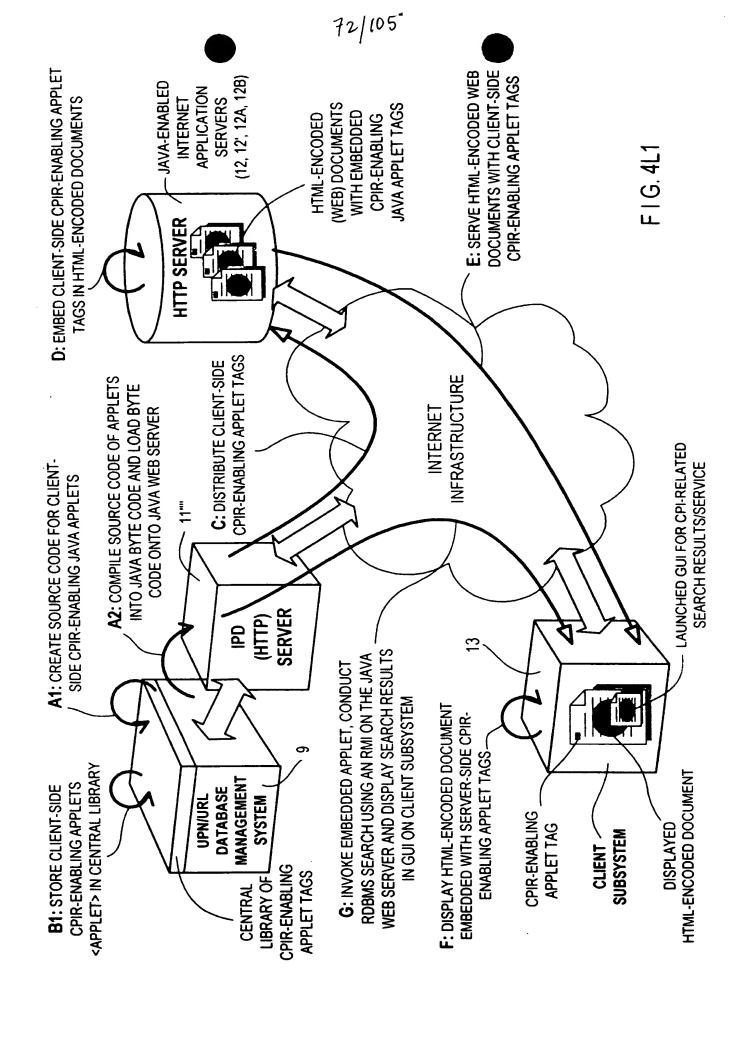


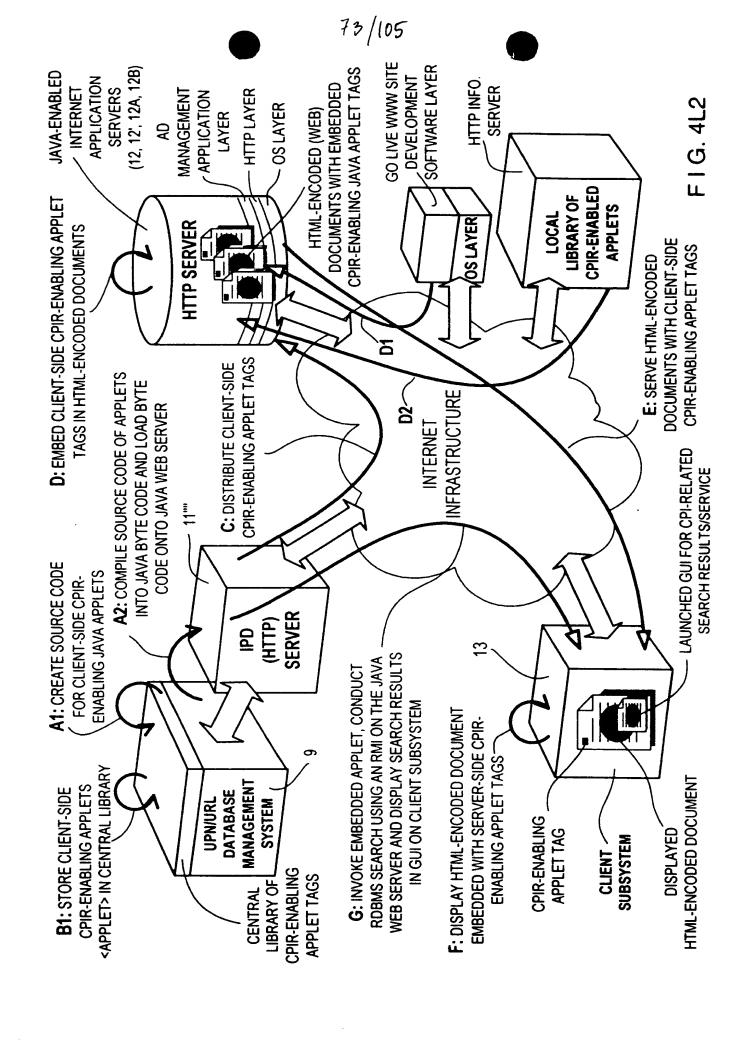


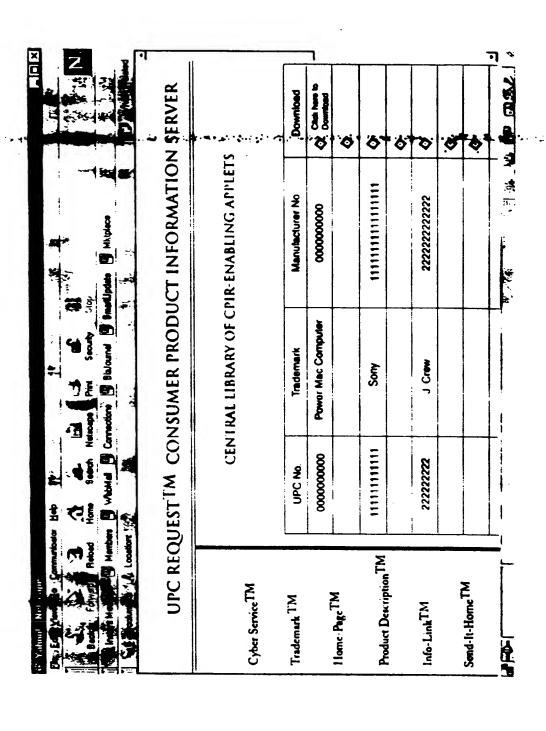
F I G. 4K1



F I G. 4K2







F I G. 4M1

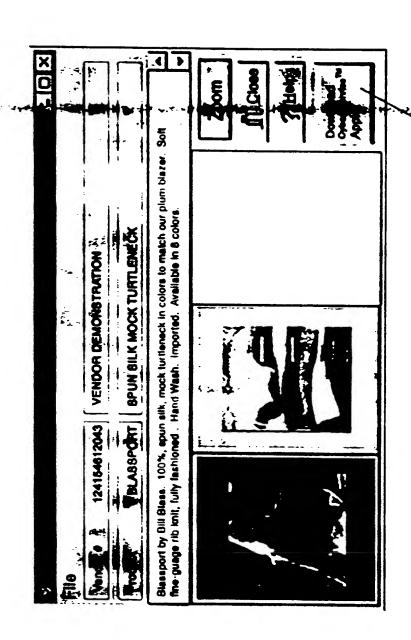
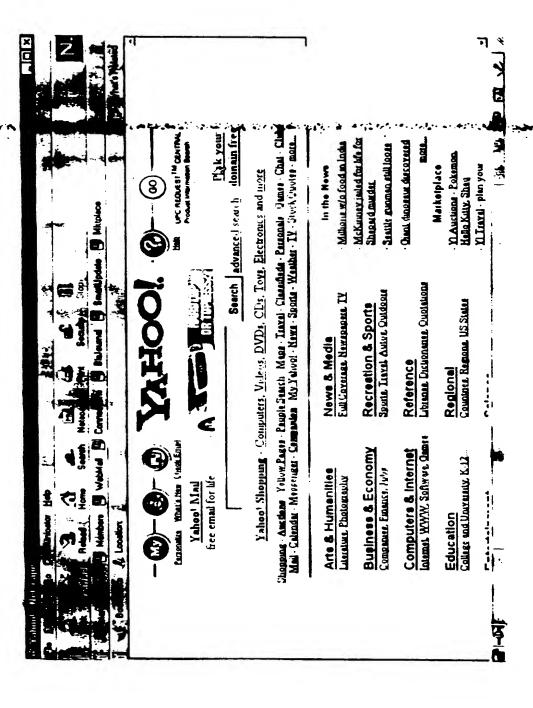
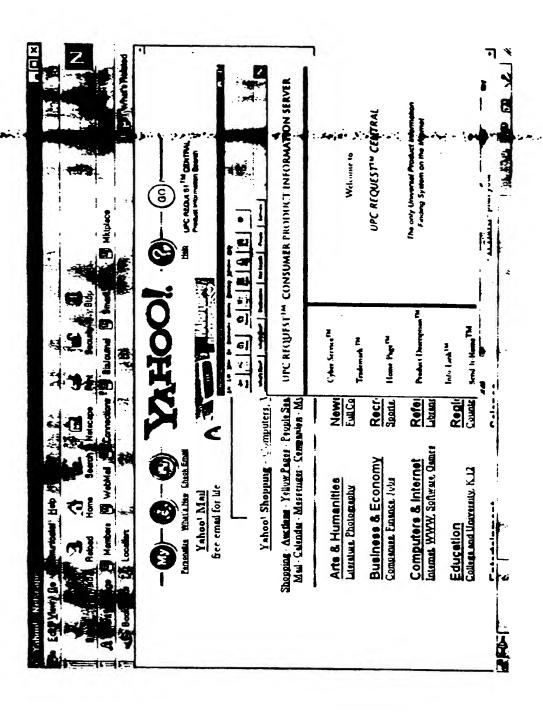


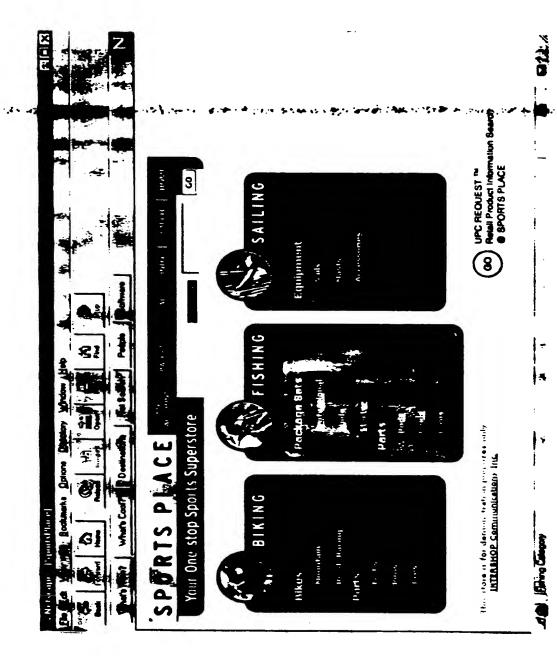
FIG. 4M2



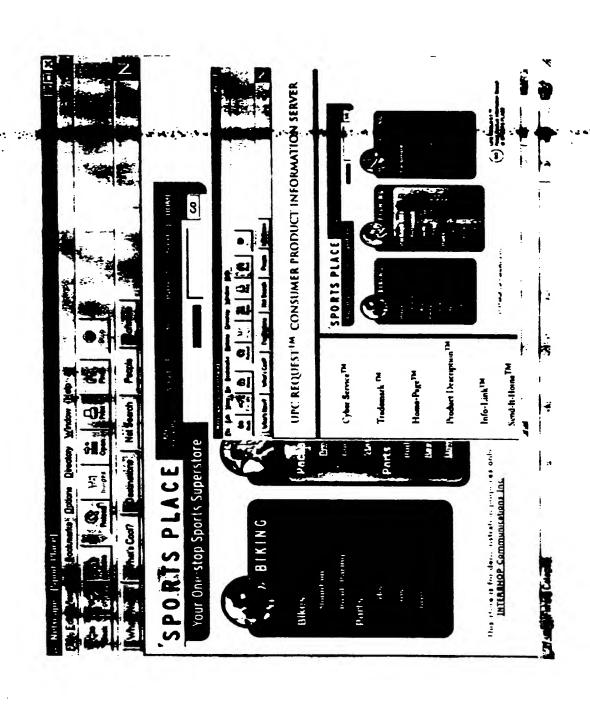
F I G. 4N1



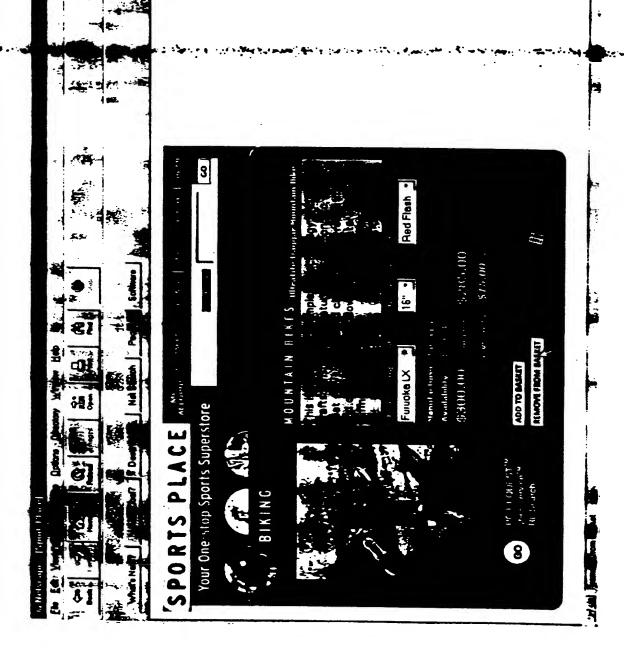
F I G. 4N2



F1G. 401



F1G. 402



F1G. 4P1

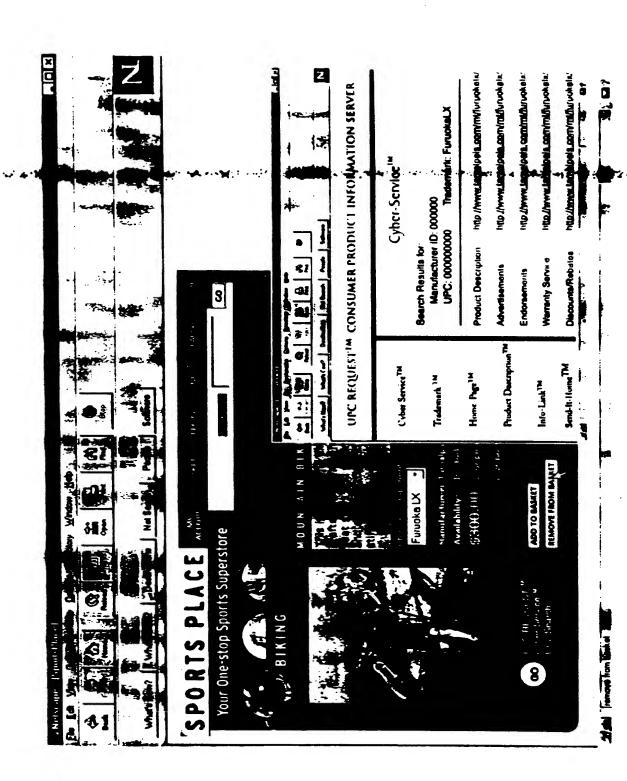
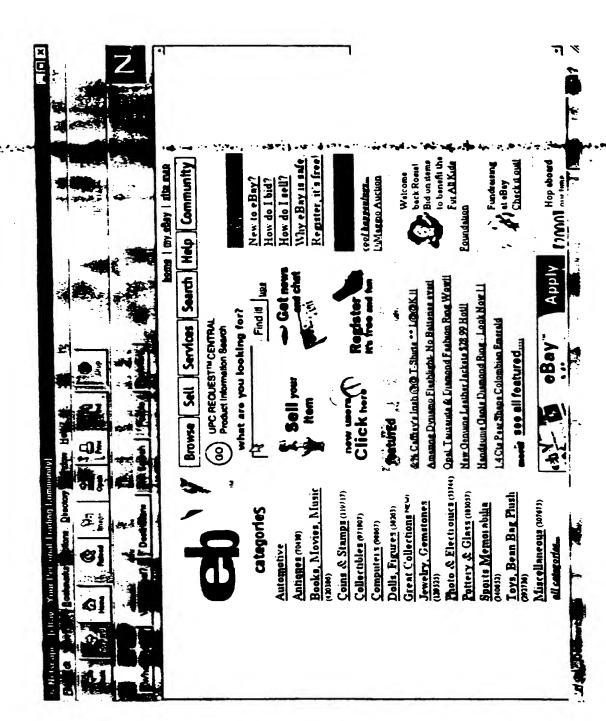
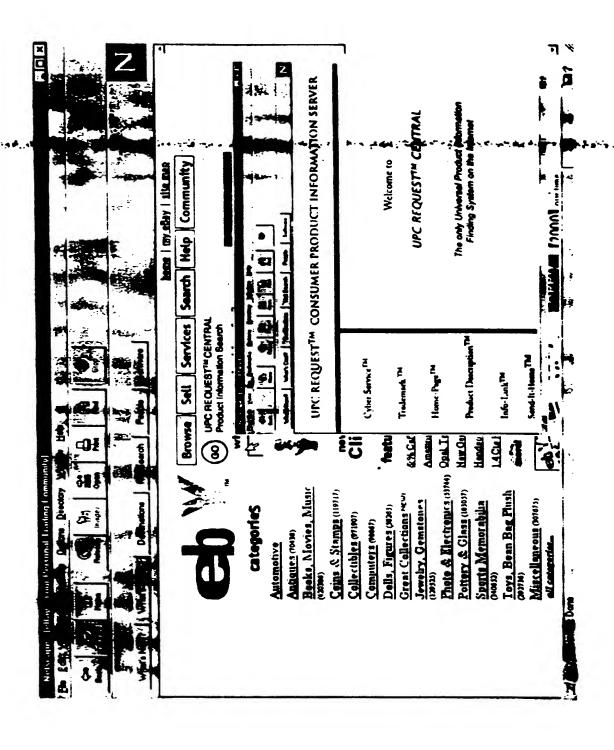


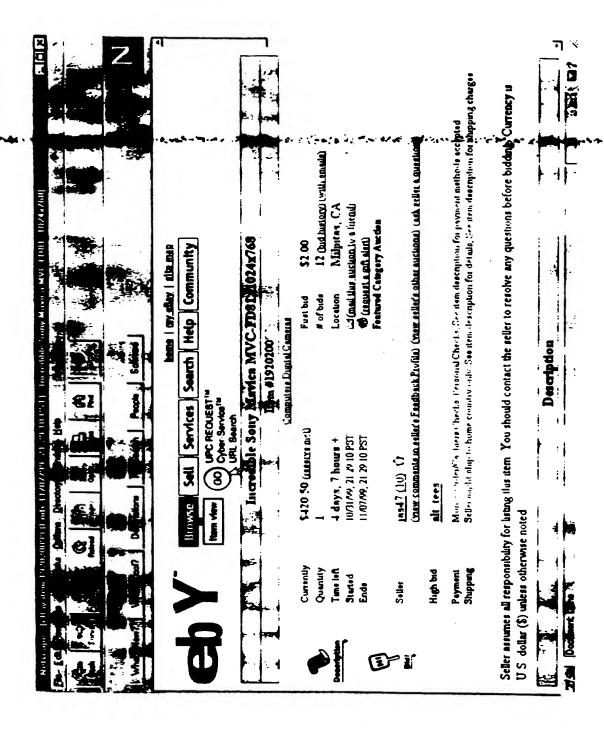
FIG. 4P2



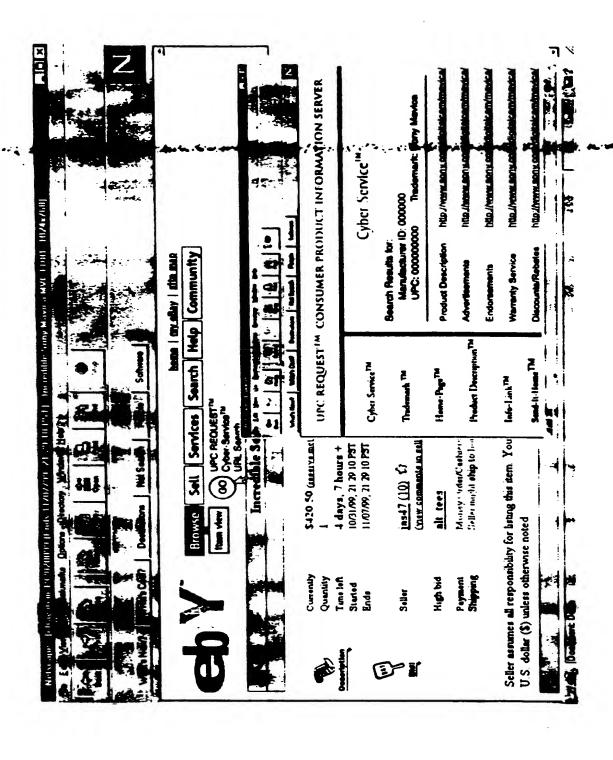
F1G. 401



F1G. 4Q2



F1G. 4R1



F1G. 4R2

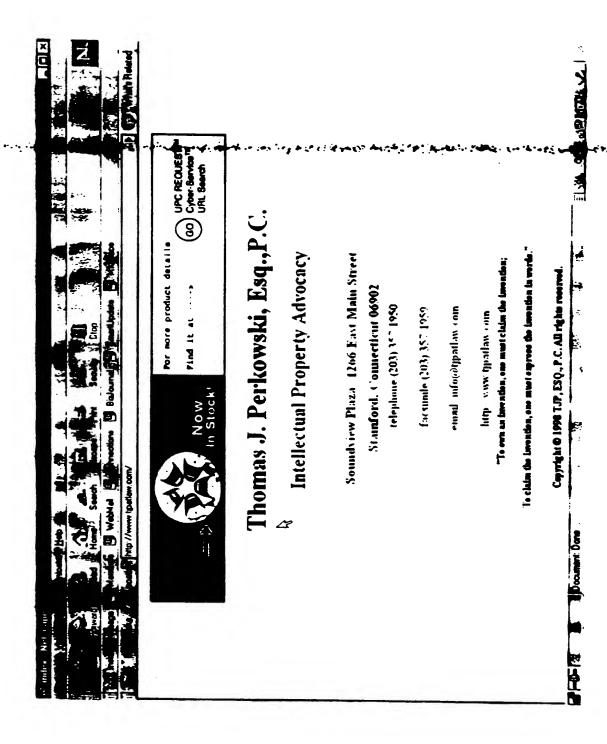


FIG. 4S1

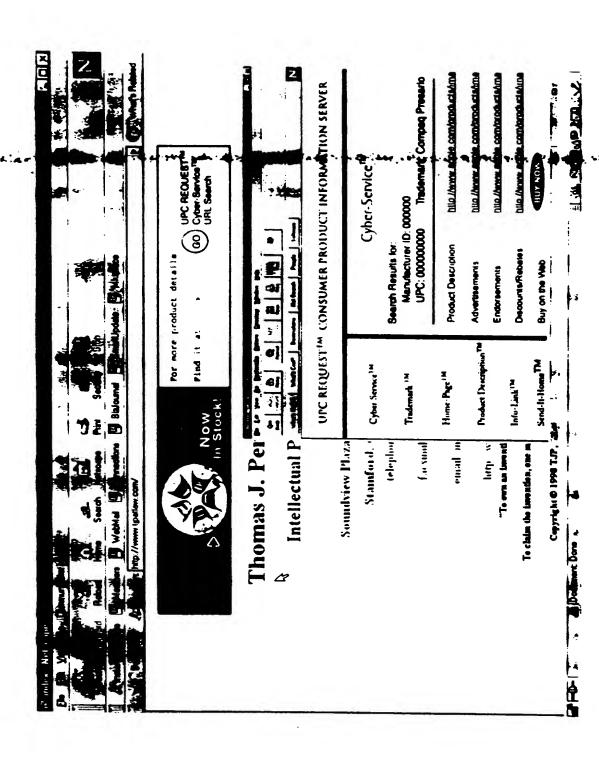
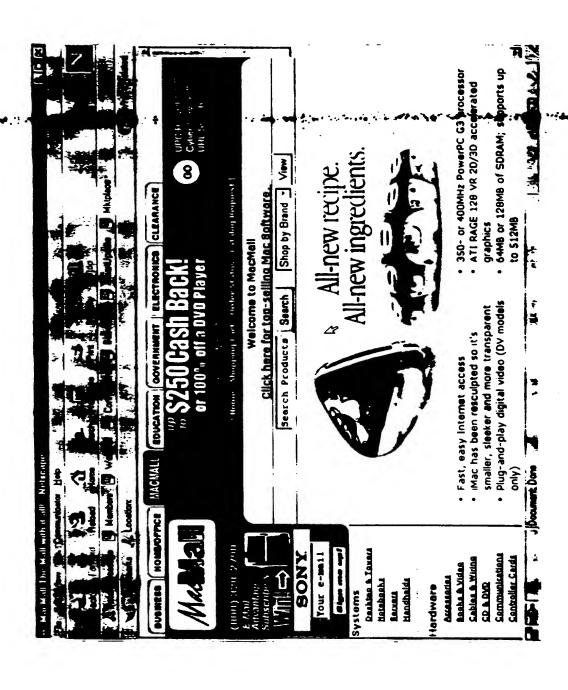
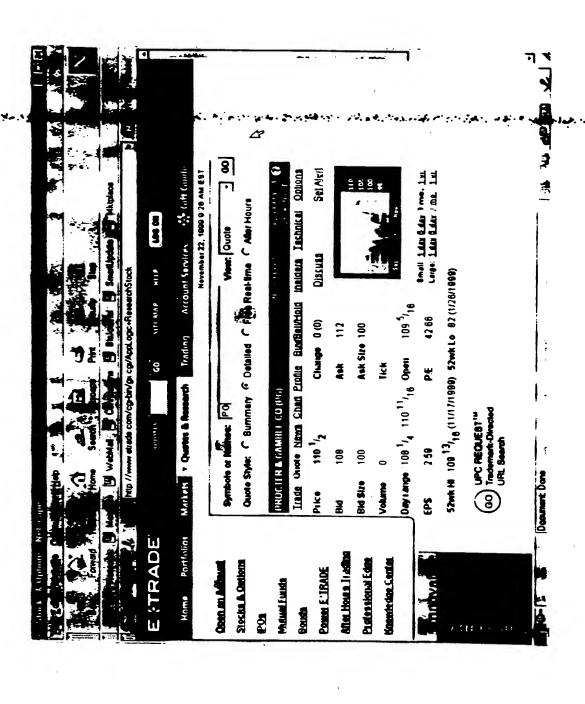


FIG. 4S2



F1G. 4S3



F1G. 4T1

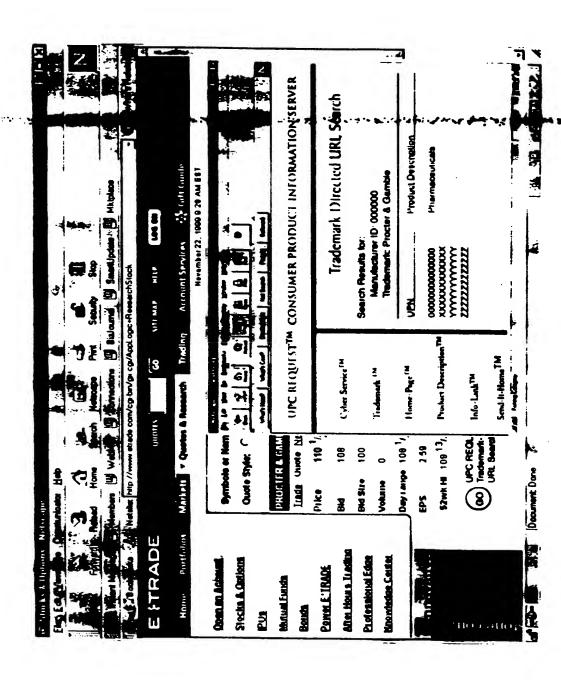
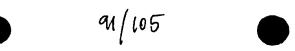
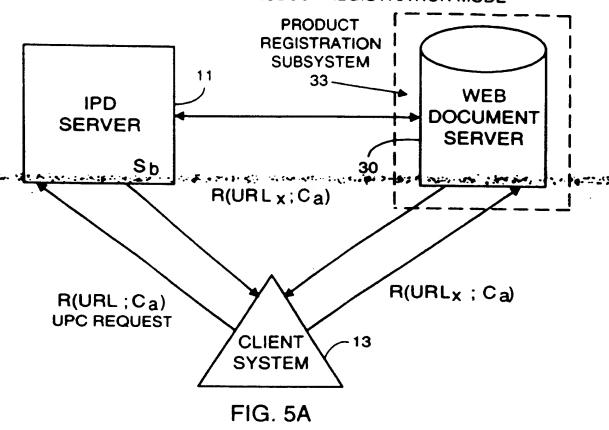


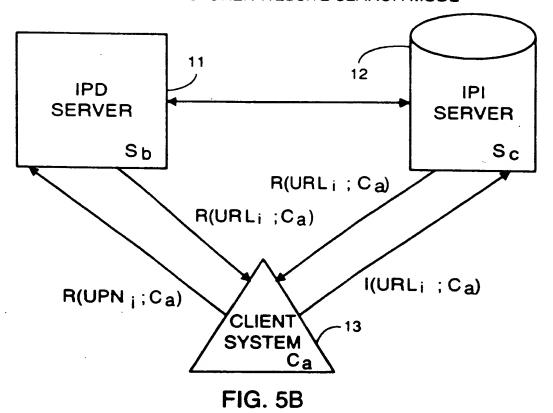
FIG. 4T2



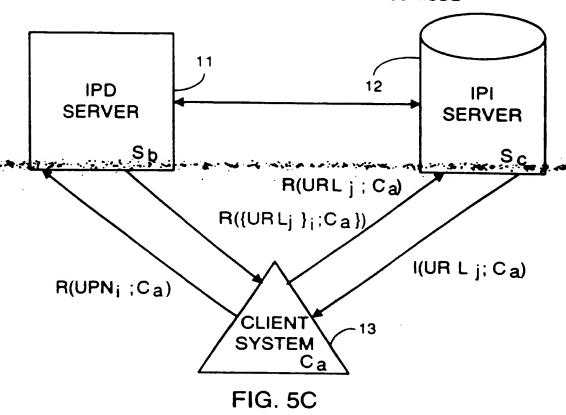
MANUFACTURER / PRODUCT REGISTRATION MODE

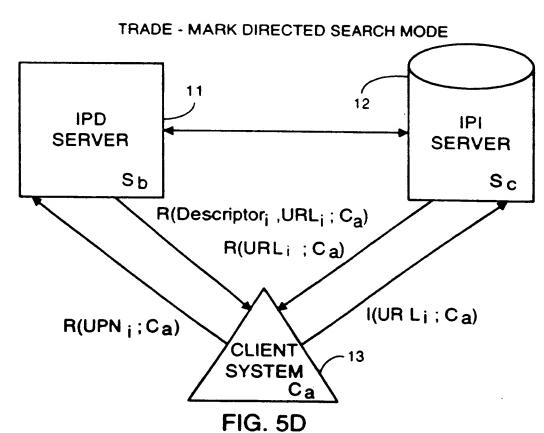


MANUFACTURER WEBSITE SEARCH MODE



UPN - DIRECTED INFORMATION ACCESS MODE





PRODUCT - DESCRIPTION DIRECTED SEARCH MODE

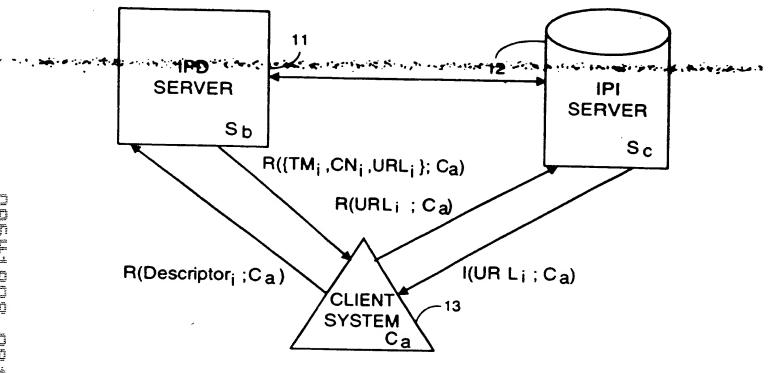


FIG. 5E

ACTIVATE MANUFACTURER / PRODUCT
REGISTRATION MODE BY SELECTING MODE
ACTIVATION CHECK BOX ON CONTROL STRIP
OF GUI DISPLAYED ON CLIENT SYSTEM, AND
SENDING HTTP BEQUEST TO JPD SERVER OF JPL
FINDING AND SERVING SUBSYSTEM

IPD SERVER SENDS HTML DOCUMENT TO REQUESTING CLIENT SUBSYSTEM FOR DISPLAY IN INFORMATION DISPLAY FRAME OF GUI THEREOF

THE MANUFACTURER FOLLOWS INSTRUCTIONS
DISPLAYED ON THE HTML DOCUMENT LINKING TO
WEB DOCUMENT SERVER OF THE
MANUFACTURER /PRODUCT REGISTRATION
SUBSYSTEM AND CARRYING OUT OF THE
PROCEDURES MANAGED THEREBY

FIG. 6A

В

SELECT MANUFACTURER WEBSITE SEARCH MODE BY SELECTING DESIGNATED CHECK BOX BUTTON IN CONTROL FRAME OF **GUI** OF REQUESTING CLIENT SUBSYSTEM

IPD SERVER SENDS HTML FORM TO REQUESTING

****CLIENT: SUBSYSTEM FOR DISPLAY
FRAME OF GUI OF REQUESTING CLIENT SUBSYSTEM

В

E

ENTER UPN ON CONSUMER PRODUCT INTO INPUT BOX
OF THE HTML FORM, SELECT SUBMIT BUTTON, AND SEND
HTML FORM (WITH UPN VALUE) TO THE CGI OF
IPD SERVER IN THE SELECTED MODE

THE HTTP PROGRAM OF THE IPD SERVER PASSES UPN TO CGI AND THE CGI SCRIPT TRANSLATES THE QUERY STRING INTO A PROPER QUERY FOR THE RDBMS OF THE IPD SERVER IN THE SELECTED MODE

THE TRANSLATED QUERY IS USED TO SEARCH THE RDBMS TO FIND THE URL OF THE HOME PAGE OF THE MANUFACTURER OF THE PRODUCT HAVING THE UPN INPUT TO THE HTML FORM

THE **CGI** CREATES ON OUTPUT **HTML** FORM WITH RESULTS FROM THE **RDBMS** SEARCH

THE URL OF THE MANUFACTURERS WWW HOME PAGE IS SELECTED BY CONSUMER OR SALES CLERK TO LINK TO HOME PAGE THEREOF

FIG. 6B

SELECT UPN - DIRECTED SEARCH MODE BY SELECTING DESIGNATED CHECK BOX IN CONTROL FRAME OF THE GUI OF REQUESTING CLIENT SUBSYSTEM

IPD SERVER SENDS HTML FORM TO REQUESTING CLIENT SUBSYSTEM FOR DISPLAY IN INFORMATION DISPLAY FRAME OF GUI OF REQUESTING CLIENT SUBSYSTEM

В

C

D

Ε

ENTER UPN ON CONSUMER PRODUCT INTO INPUT BOX
OF THE HTML FORM, SELECT SUBMIT BUTTON, AND SEND
HTML FORM (WITH UPN VALUE) TO THE CGI OF
THE IPD SERVER IN THE SELECTED MODE

THE HTTP PROGRAM OF THE IPD SERVER PASSES THE UPN
TO THE CGI AND THE CGI SCRIPT TRANSLATES THE
QUERY STRING INTO A PROPER QUERY FOR THE RDBMS
OF THE IPD SERVER

THE TRANSLATED QUERY IS USED TO SEARCH THE RDBMS
TO FIND THE SET OF URLS POINTING TO THE HTML
DOCUMENTS PUBLISHED ON THE INTERNET AND
CONTAINING INFORMATION RELATING TO THE CONSUMER
PRODUCT HAVING THE UPN ENTERED INTO THE INPUT OF
THE HTML FORM

THE **CGI** CREATES ON OUTPUT **HTML** FORM WITH THE RESULTS FROM THE **RDBMS** SEARCH

DISPLAY IN THE INFORMATION DISPLAY FRAME THE SET OF URLs RETRIEVED FROM THE RDBMS SEARCH AT BLOCK F ABOVE

LINK TO A DESIRED CONSUMER PRODUCT RELATED INFORMATION BY SELECTING THE CORRESPONDING URL FROM THE DISPLAYED INFORMATION MENU

F I G. 6C

SELECT TRADEMARK - DIRECTED SEARCH MODE BY SELECTING THE DESIGNATED CHECK BOX IN CONTROL FRAME OF THE GUI OF THE REQUESTING CLIENT SUBSYSTEM

IPD SERVER SENDS HTML FORM TO REQUESTING
CLIENT SUBSYSTEM FOR DISPLAY IN INFORMATION DISPLAY
FRAME OF GUI OF REQUESTING CLIENT SUBSYSTEM

ENTER TRADEMARK OR TRADENAME (USED ON CONSUMER PRODUCT) INTO THE INPUT BOX OF THE HTML FORM, SELECT SUBMIT BUTTON, AND SEND HTML FORM (WITH TRADEMARK VALUE) TO THE CGI OF THE IPD SERVER IN THE SELECTED MODE

THE HTTP PROGRAM OF THE IPD SERVER PASSES THE ENTERED TRADEMARK TO THE CGI AND THE CGI SCRIPT TRANSLATES THE QUERY STRING INTO A PROPER QUERY FOR SEARCHING THE RDBMS OF THE IPD SERVER IN THE SELECTED MODE

THE TRANSLATED QUERY IS USED TO SEARCH THE RDBMS
TO FIND ALL REGISTERED CONSUMER PRODUCTS HAVING
PRODUCT DESCRIPTIONS THAT ARE LINKED (i.e. RELATED)
TO THE TRADEMARK OR TRADENAME ENTERED INTO THE
INPUT BOX OF THE HTML FORM

E

F I G. 6D1



CGI SCRIPT CREATES ANOTHER HTML FORM, AND I
NSERTS THE SEARCH RESULTS WITHIN THE INPUT BOX
OF THE HTML FORM AND PROVIDES THE INPUT BOX WITH
A RADIO-TYPE SUBMIT BUTTONS; AND THEN SENDS HTML
FORM TO REQUESTING CLIENT SUBSYSTEM FOR DISPLAT
IN INFORMATION DISPLAY FRAME

USE THE RADIO-BUTTON TO SELECT A TRIPLET DATA SET FROM THE INPUT BOX (i.e. PRODUCT DESCRIPTION, MANUFACTURER AND UPN) AND THEN SELECT SUBMIT BUTTON TO SEND REQUEST TO THE HTTP PROGRAM TO GET THE COMPLETED HTML FORM

THE HTTP PROGRAM OF THE IPD SERVER PASSES THE ENTERED DATA SET (SELECTED FROM THE INPUT BOX) TO THE CGI AND THE CGI SCRIPT TRANSLATES THE QUERY STRING INTO A PROPER QUERY FOR SEARCHING THE RDBMS OF THE IPD SERVER IN THE SELECTED MODE

THE TRANSLATED QUERY IS USED TO SEARCH THE RDBMS
TO FIND THE SET OF URLs RELATED TO THE REGISTERED
CONSUMER PRODUCT ASSIGNED THE UPN IN THE
SELECTED DATA TRIPLET

THE CGI SCRIPT CREATES HTML FORM, INSERTS RESULTS FROM SEARCH THEREINTO, AND SENDS THE HTML FORM TO THE REQUESTING CLIENT SUBSYSTEM

B

F I G. 6D2

DISPLAY THE SET OF URLs FROM SEARCH
IN THE HTML FORM ON THE INFORMATION DISPLAY
FRAME OF THE GUI OF REQUESTING CLIENT
SUBSYSTEM

ACCESS AND DISPLAY ANY HTML DOCUMENT REFERENCED WITHIN THE DISPLAYED URL MENU BY SELECTING THE CORRESPONDING URL ANCHORED THERETO

FIG. 6D3

K

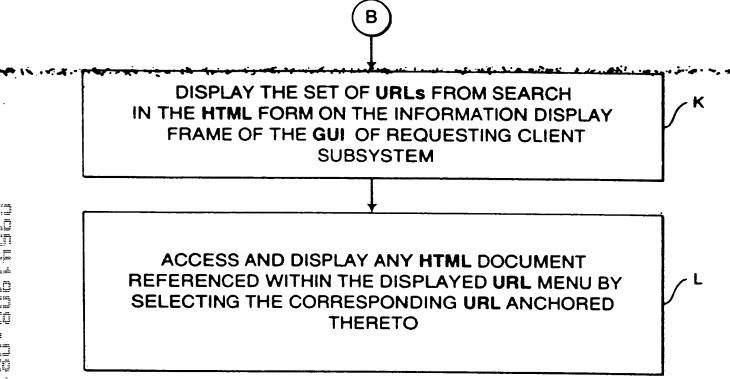


FIG. 6D3

SELECT PRODUCT - DESCRIPTION DIRECTED SEARCH MODE BY SELECTING THE DESIGNATED CHECK BOX IN CONTROL FRAME OF THE **GUI** OF THE REQUESTING CLIENT SUBSYSTEM

CLIENT SUBSYSTEM FOR DISPLAY IN INFORMATION DISPLAY
FRAME OF GUI OF REQUESTING CLIENT SUBSYSTEM

ENTER PRODUCT DESCRIPTION (FOR CONSUMER PRODUCT ON WHICH INFORMATION IS SOUGHT) INTO THE INPUT BOX OF THE HTML FORM, SELECT SUBMIT BUTTON, AND SEND HTML FORM (WITH PRODUCT - DESCRIPTION VALUE) TO CGF OF THE IPD SERVER IN THE SELECTED MODE

THE HTTP PROGRAM OF THE IPD SERVER PASSES THE PRODUCT - DESCRIPTION TO THE CGI AND THE CGI SCRIPT TRANSLATES THE QUERY STRING INTO A PROPER QUERY FOR SEARCHING THE RDBMS OF THE IPD SERVER IN THE SELECTED MODE

THE TRANSLATED QUERY IS USED TO SEARCH THE RDBMS
TO FIND ALL REGISTERED CONSUMER PRODUCTS HAVING
PRODUCT DESCRIPTIONS THAT ARE LINKED (i.e. RELATED)
TO THE PRODUCT - DESCRIPTION ENTERED
INTO THE INPUT BOX OF THE HTML FORM

F I G. 6E1



CGI SCRIPT CREATES ANOTHER HTML FORM, AND INSERTS
THE SEARCH RESULTS WITHIN THE INPUT BOX
OF THE HTML FORM AND PROVIDES THE INPUT BOX WITH
A RADIO-TYPE SUBMIT BUTTONS; AND THEN SENDS HTML
FORM TO REQUESTING CLIENT SUBSYSTEM FOR DISPLAY

USE THE RADIO-BUTTON TO SELECT A TRIPLET DATA SET FROM THE INPUT BOX (i.e. TRADEMARK, MANUFACTURER AND **UPN**) AND THEN SELECT SUBMIT BUTTON TO SEND REQUEST TO THE HTTP PROGRAM TO GET THE COMPLETED HTML FORM

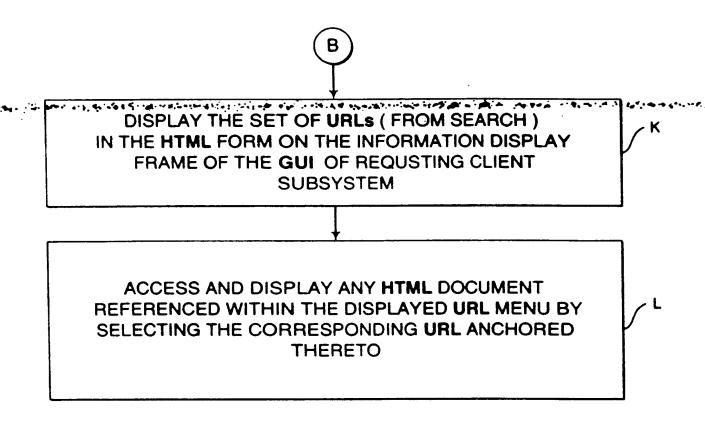
THE HTTP PROGRAM OF THE IPD SERVER PASSES THE ENTERED DATA SET (SELECTED FROM THE INPUT BOX) TO THE CGI AND THE CGI SCRIPT TRANSLATES THE QUERY STRING INTO A PROPER QUERY FOR SEARCHING THE RDBMS OF THE IPD SERVER IN THE SELECTED MODE

THE TRANSLATED QUERY IS USED TO SEARCH THE ROBMS
TO FIND THE SET OF URLs RELATED TO THE REGISTERED
CONSUMER PRODUCT ASSIGNED THE UPN IN THE
SELECTED DATA TRIPLET

THE CGI SCRIPT CREATES HTML FORM, INSERTS RESULTS FROM SEARCH THEREINTO, AND SENDS THE HTML FORM TO THE REQUESTING CLIENT SUBSYSTEM

B

FIG. 6E2



F I G. 6E3

•

